2015

The Effects of Acculturative Stress on Mental Health Outcomes of African Immigrant and Refugee Youth: Coping as a Moderator

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THE EFFECTS OF ACCULTURATIVE STRESS ON MENTAL HEALTH OUTCOMES OF AFRICAN IMMIGRANT AND REFUGEE YOUTH: COPING AS A MODERATOR

A THESIS SUBMITTED TO

THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF

MASTER OF ARTS

PROGRAM IN CLINICAL PSYCHOLOGY

BY

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CHICAGO, ILLINOIS

AUGUST 2015

ACKNOWLEDGMENTS

I would like to thank my committee chair, Dr. Noni Gaylord-Harden for her help, support, and understanding throughout this process. I would also like to thank my reader Dr. James Garbarino for his invaluable expertise, his patience, and encouragement in regard to this thesis. My thanks also to my undergraduate research team who worked tirelessly during the data collection phase of the project.

Finally I would like to express my deepest gratitude to the staff and clients of Pan African Association and to the pastor and congregants of International Central Gospel Church-Chicago. Without their enthusiasm and cooperation, this thesis would not have been possible.

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ABSTRACT

For immigrant and refugee adolescents, acculturative stress such as social and family conflict may be experienced as a result of the acculturation process (Berry, 2006; Mena, Padilla, & Maldonado, 1987). While research documents that these adolescents demonstrate patterns of associations between acculturative stress and internalizing symptoms, development of coping strategies may help youth to address adverse stressors (Oppedal, Roysamb, & Heyerdahl, 2005; Zimmer-Gembeck & Skinner, 2011). In addition to mainstream coping strategies, culturally-relevant coping strategies may be used by ethnic minorities, particularly those of African descent (Utsey, Brown, & Bolden, 2004). The purpose of the current study was to determine if mainstream and culturally-relevant coping strategies are successful in moderating the deleterious effects of acculturative stress on the mental health of African immigrant and refugee youth.

The current study was comprised of 14 African immigrant and refugee adolescents between the ages of 11-18 (mean age = 14.65; 35.7% female). Participants were recruited from a church and a community-based organization serving immigrants and refugees. Data assessing levels of objective and perceived acculturative stress, use of mainstream and culturally-relevant coping strategies, externalizing and internalizing symptoms was collected. Regression analyses were used to determine whether coping higher acculturative stress levels were related to higher levels of culturally-relevant

coping use and if coping moderated the stress outcomes relationship. Consistent with hypothesis, higher levels of objective acculturative stress were related to higher levels of Maintaining Harmony coping use. Further, status (immigrant vs. refugee) appeared to influence this relationship. No other culturally-relevant strategies were related to acculturative stress. Inconsistent with hypothesis, active and avoidant coping strategies did not moderate the stress-outcomes relationship; however, support seeking coping affected this relationship in a direction different than predicted. Consistent with hypotheses, Maintaining Harmony coping moderated the relationship between objective stress and internalizing/externalizing symptoms. Inconsistent with hypotheses, no other culturally-relevant strategies affected this relationship. Results are discussed with regard to objective and perceived stress and implications of status on these outcomes.

CHAPTER ONE

INTRODUCTION

Of the stressors that immigrants and refugees experience upon immigrating to a new country, acculturation issues have been a central concern for researchers (Berry, Phinney, Sam & Vedder, 2010). Acculturation stress factors have a widespread reach across multiple life domains including with family and peers, in language, and discrimination (Pumariega, Rothe, & Pumariega, 2005). Of particular interest is acculturative stress during the period of adolescence, a time when there are already great changes in the peer, school, and family domains. Characteristics such as gender and generational status also add complexity to the ways in which acculturative stress affects the experience of immigrants and refugees.

The study of acculturative stress and its effect on mental health and well-being has been widespread across various refugee and immigrant groups (Smokowski, Bacallao, & Buchanan, 2009; Mejia & McCarthy, 2010; Yeh, 2003; Oppedal, Røysamb, & Heyerdahl, 2005). There is, however, a paucity of research concerning the specific challenges that African immigrants and refugees face. African American youth in urban communities are already exposed to greater amounts of stressors than their European American counterparts (Brantley, O'Hea, Jones, & Mehan, 2002; Morrison Gutman, McLoyd, & Tokoyawa, 2005). African immigrant and refugee adolescents may be subject to these stressors, as well as stress from acculturation with both mainstream

culture and with their cultural group (Beru 2010; Kamya, 1997). There is a dearth of studies concerning these stressors with this population, therefore creating a lack of understanding of how they might affect the well-being of adolescents.

Evidence of the deleterious effects of acculturative stress on mental health is prevalent in the literature; it has been linked to increased externalizing problems and internalizing problems for those with higher levels (Oppedal et al., 2005; Mejia & McCarthy, 2010; Yeh, 2003; Smokowski, Bacallao, & Buchanan, 2009; Trickett & Jones, 2007). In literature examining the effects of other adolescent stressors, coping strategies have been suggested as a possible moderating factor in the stress-mental health relationship. As coping strategies are effective in changing the relationship between other stressors and mental health outcomes, it is of interest to examine how coping strategies may impact the relationship between acculturative stressors and outcomes. There is also some evidence that immigrants and refugees may use culturally-relevant coping strategies to deal with issues of acculturative stress (Kim, Suh, Kim, & Gopala, 2012; Beru, 2002). Although these strategies may be beneficial in dealing with stress, how they may change the trajectory of outcomes has yet to be studied extensively.

Given the limitations of the literature to date on acculturative stress, coping, and mental health the purpose of the current study is to examine the relationship among those variables in African immigrant and refugee adolescents. More specifically, the study will investigate existing relationship between acculturative stress and internalizing and externalizing symptoms in the target population, and it will seek to understand how universal and culturally-relevant coping strategies moderate this relationship. The

following sections of this proposal will review the literature on the following topics pertinent to this study on acculturative stress: a) contemporary African migration, b) acculturative stress in immigrant and refugee populations, c) acculturative stress in adolescent immigrant and refugee populations, d) associations between acculturative stress and negative mental health outcomes in adolescents, e) the role of coping strategies as a moderator, f) gender differences in acculturative stress, coping, and mental health outcomes, and g) age differences in acculturative stress, coping strategy use, and mental health outcomes.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Contemporary African Migration

Over the past fifty years, African immigration to the United States has greatly increased; in 2011, the United States Census showed that black immigrants made up 9.2 percent of the black population (Nwadiora, 2007; U.S. Census, 2012). Among those coming from the African continent to the United States, there is great diversity in nationality, ethnicity, language, and immigration status. Nigeria and Ethiopia comprise the two largest African immigrant groups to the U.S., and while Somalia and Ethiopia lead in the amount of refugees (U.S. Department of Homeland Security, 2013; [1]U.S. Department of State, 2014). In 2013, 15,980 refugees from 24 African nations came to the United States, a fifty percent increase from the previous year ([2]U.S. Department of State, 2014). Another 15,000 refugees from the African continent are predicted for 2014. African immigrants and refugees have a diverse array of reasons for migration to the United States. Approximately 280,000 Africans who have come to the U.S. since 1975 have claimed refugee status ([2]U.S. Department of State, 2014). These refugees, as the designation suggests, are often forced to leave their country for seeking safety from violence or political instability and are granted asylum in the United States. Among other African immigrants, migration for educational purposes or job opportunities is common (Beru, 2010). As interest in African colonization began to decline in the late 1950s into

the 60s, numerous sub-Saharan African nations were able to escape foreign rule and achieve independence. Though independence brought new possibilities for the new nations, opportunities for education still remained scarce and so sparked Africa's "brain drain" of the late 1960s and 70s. Specifically, young African professionals unable to find jobs in their native lands sought to find employment elsewhere, the United States becoming one of these professionals' prime destinations (Mutume, 2003).

Concentrated largely on the north side of the city, Africans make up 3.4% of the immigrant population within the Greater Chicago area. Beginning in the early 1990s, African refugees from Eritrea, Ethiopia, and Somalia were resettled in Chicago and built communities in neighborhoods such as Rogers Park and Edgewater. Social service agencies and organizations geared toward serving the needs of these migrant groups began to emerge. These communities attracted later immigrants from countries such as Nigeria, Ghana, and Senegal and grew the African population in Chicago to be the fifth largest in the United States (Chicago Tribune, 2003; 2013). As immigration rates to Chicago continue to increase, and the number of children of immigrants, now 777, 000, also increases; therefore, providing immigrants and refugees with resources that contribute to their success and overall well-being is of great importance to the Chicago community as a whole (Illinois Coalition for Immigrant and Refugee Rights, 2009). As will be discussed below, immigrants and refugees face unique stressors as a result of emigrating that can have detrimental effects on their emotional and mental health. Furthermore, these effects may be compounded for adolescents of African-descent who are already encountering stressors due to their race/ethnicity and developmental stage.

Research that examines factors that contribute to the well-being of African immigrants can inform intervention efforts targeting this unique set of stressors within this population.

Acculturative Stress in Immigrant and Refugee Populations

For those who immigrate to a new country, enduring acculturation, or the process of adaptation to the host culture, is an inevitable experience (Berry & Sam, 2006). Acculturation is often conceptualized in a bi-dimensional framework, with two independent issues: the degree to which people wish to seek involvement with the host culture, and the degree to which people desire to maintain their heritage culture (Berry, Phinney, Sam, & Vedder, 2010). These two issues are evident across multiple life domains such as language, identity, and values (Berry, et al., 2010). For example, in the language domain, acculturation challenges can manifest in learning and gaining competence in the primary language and dialect of the host culture, while retaining (if applicable) the heritage language (Trickett & Birman, 2005). Also, as part of the acculturation process, immigrants may choose to adjust their values and beliefs to include that of the host culture, or to retain part of their culture of origin (Berry & Sam, 2006). Seeking to answer questions of cultural maintenance and interaction with others by navigating the development of a social identity is also often an important acculturation issue for immigrants (Berry, Phinney, Sam & Vedder, 2010). Experiences of acculturation can differ across groups, as each ethnic or national groups will have varying degrees of cultural similarities with the host culture (e.g. moving from an English-speaking, sub-Saharan nation to the United States). Though refugees and immigrants

may differ in their reasons for coming to the host country, both groups will face similar acculturation processes across domains of language, identity, and values.

For immigrants and refugees, navigating between the home and host cultures can be difficult at times, and stress may be experienced as a result of the acculturation process. The resulting stress is called acculturative stress and is defined as a stress experienced in response to conflicting life events that are rooted in intercultural contact (Berry, 2006; Mena, Padilla, & Maldonado, 1987). Studies also show that issues such as social conflict, including discrimination and prejudice, language problems, and family conflict, can be experienced as components of acculturative stress as immigrants establish and adjust themselves to mainstream culture. Specifically, social conflict may include being the target of microaggressions and facing ethnic or racial discrimination due to immigration status (Arbona et al., 2010). Also, language problems can encompass challenges with language acquisition of the host language, as well as retention and use of immigrants' primary language (Trickett & Birman, 2005). Within the family environment, stress may be experienced due to intergenerational conflict among family members and a shift in roles within the family structure (Arbona et al., 2010). Women, for instance, who once worked within the home may seek outside employment post-immigration to contribute financially to the family, therefore changing from their normative role (e.g., wife, mother, homemaker) to that of a provider (Kwak, 2003). Acculturative stress is a unique construct as it encompasses stressors in multiple domains of life. In light of the pervasive nature of acculturative stress, and the increasing number of refugees and immigrants, it has been of great importance to examine the prevalence of

acculturative stress in various immigrant communities and determine how it affects individuals psychologically.

The vast majority of research on acculturation and acculturative stress has been examined in Latino and Asian populations with a limited focus on African populations (Beru 2010; Kamya, 1997). Furthermore, the few studies that focus on African populations generally concern adults, with children and adolescents being largely absent from the literature. However, the few studies conducted with adult populations indicate that, similar to Latino and Asian immigrants, African immigrants also experience acculturation-related stressors that impinge upon well-being (Beru, 2010). Research designed to determine the unique acculturative stress factors experienced by African immigrants to the United States finds that among concerns in the domain of language (e.g. accent being mistaken for lack of fluency), and differences in cultural values (e.g. adjusting to an individual vs. communal worldview), there are also many difficulties related to prejudice and discrimination (Beru, 2010). Although discrimination and prejudice stressors are regarded as an acculturative stress component for all immigrants, African immigrants reported encountering discrimination from both mainstream society as well as from Black Americans in the same racial group (Beru, 2010).

According to United States census, African immigrants are considered a part of the Black/African American racial group, a classification that includes Black Americans and Caribbean Americans. Though the ethnicities and nationalities that comprise the Black racial group are diverse, Blacks who are immigrants or recent descendants of immigrants are still a minority within their overall racial group in the United States.

Sometimes referred to as an "invisible" immigrant group, African immigrants not only face acculturative stress in the mainstream culture, but also face unique challenge in acculturating to Black American culture due to their status as cultural minorities within their racial group (Takyi, 2002). Due to the "minority within a minority" status rendering them "invisible", African immigrants are often unacknowledged or underrepresented in research focusing on Blacks/African Americans (Kamya, 1997; Takyi, 2002), limiting our understanding of the experiences of a group that is increasing in number in the United States.

Given the paucity of research, it is unclear if the findings on the prevalence of acculturative stress with adult immigrants extend to youth immigrants of African descent. In a Norwegian study with ethnically diverse youth originally from Asian, Africa, and eastern European countries, there were differences among ethnic groups in the acculturation risk and protective factors reported such as host [cultural] competence and discrimination, and conflicting family values (Oppedal, Røysamb & Heyerdahl, 2005). Among the groups surveyed, there was no one ethnic group that consistently ranked low or high on all risk and protective factors. The Somali ethnic group was among those who exhibited low to mid-level mental health problems, although they had low overall problems. They also reported significantly higher levels of discrimination and stronger family values than the majority of the other ethnic groups (Oppedal, Røysamb, & Heyerdahl, 2005). Given the ambivalent nature of the above findings, and the vast array of ethnicities and cultures represented in African immigrant and refugee communities, research is warranted to understand more about the associations among social and

familial acculturative stress experiences, mental health outcomes, and moderating factors present in African immigrant adolescents.

Acculturative Stress in Adolescent Immigrants and Refugees

The aforementioned research focused on adult populations, but adolescent immigrants and refugees also experience acculturative stressors. Specifically for adolescents, acculturative stress can occur in relationships with parents and family members, as well as in school settings, peer relationships, and in social settings (Pumariega, Rothe, & Pumariega, 2005). Youth, for example, may have to take on language or cultural brokering roles for parents or caretakers, thus altering the usual family dynamic (Buriel, Perez, DeMent, Chavez, & Moran, 1998). These roles may include behaviors such as answering the phone or door for parents, translating documents, accompanying caretakers to appointments, and even explaining a custom of the host culture to parents (Jones & Trickett, 2005; Trickett & Jones, 2007).

Those coming from outside a Western context may also have a shift in expectations as they are influenced by the gender role values and expectations of the host culture (Oppedal, Røysamb & Heyerdahl, 2005). Female immigrant adolescents especially may experience changes in gender role expectations (e.g. working outside of the home; more autonomy) due to financial stressors in the family. Intergenerational conflict among family members in immigrant and refugee families may also give rise to increased acculturative stress for adolescents. Cultural transmission, the passing along and learning of cultural values, beliefs, and practices, is facilitated through socialization in two contexts: family and society (Kwak, 2003). Societal socialization, or passive

cultural transmission through daily interaction with the home culture, happens without pause for those living in their home culture. However, for immigrant and refugee youth, the process of cultural transmission of the home culture is disrupted upon immigration because of the loss of a direct connection to the home culture. As a result, societal socialization begins to occur through the host culture, rather than the home culture. Specifically, adolescent immigrants begin to learn the culture, values, and beliefs of the host culture instead of that of the home culture, leaving the family as the primary source of the home cultural socialization. The discrepancy between the home and host/family and societal information may become a source of conflict within immigrant and refugee families, when this social knowledge is unharmonious (Kwak, 2003).

Acculturation stress during childhood and adolescents also occurs within school and social settings, and in youths' peer relationships. Within school settings among peers, immigrant and refugee adolescents must determine if developing relationships with those from the host culture, as well as home culture, is of value (Berry, et al., 2010; Trickett & Birman, 2005). Developing relationships with peers and teachers at school may require the acquisition of new social knowledge and norms, some of which may be contrary to home culture norms (Cho & Haslam, 2010). Though children are sure to encounter others from the host culture at school and social settings, parents may encourage or put pressure on their children to remain "loyal" to their home culture (Pumariega et al, 2005). Immigrant and refugee youth may also be at risk for ethnic bullying, which is associated with negative psychosocial outcomes (McKenney, Pepler, Craig, & Connolly, 2006). In

this way, youths' peer interactions have implications for acculturation behavior, and subsequent acculturative stress.

In an international study examining acculturation, identity, and adaptation of diverse immigrant youth across thirteen countries, results demonstrated that immigrant youth tended to make peer contacts in accordance with their acculturation style (Berry, et al., 2010). For example, those who had an integrative acculturation style (high value of contact with the host culture and retention of the culture of origin) reported having both peers who were within their ethnic group and who were part of the host culture (Berry, et al., 2010). In addition, the study identified a "diffuse" profile of immigrant youth who were described as marginalized due to the characteristic of low identification with both the host culture and culture of origin. This group (approximately one-fifth of the sample) reported fewer relationships with both same-culture and host-culture peers, and as a result were most susceptible to personal and social problems, reflected in their tendencies toward isolation from peers (Berry et al., 2010). Furthermore, having a diffuse profile undermined adolescents' capacity for psychological and sociocultural adaptation. The pattern of findings above highlights the acculturative challenges and subsequent psychosocial difficulties faced by immigrant and refugee youth. Therefore, research is warranted to identify factors or behaviors that may diminish these risks.

Associations between Acculturative Stress and Negative Mental Health Outcomes in Adolescents

For refugee and immigrant adolescents from various backgrounds, patterns of associations between acculturative stress and negative mental health outcomes have been

found. In a longitudinal study conducted with Latino adolescent immigrants, two acculturative stress variables (acculturation conflict and perceived discrimination) were found to have a positive indirect effect on internalizing symptoms measured a year later; internalizing symptoms at Time 1 mediated the relationships that acculturation conflict and perceived discrimination had with Time 2 reports of internalizing symptoms (Smokowski, Bacallao, & Buchanan, 2009). Another study examined a relationship of the acculturation-related risk factors of ethnic identity crisis and perceived discrimination to internalizing and externalizing symptoms in a multi-ethnic sample of adolescent immigrants to Norway (Oppedal et al., 2005). Their results yielded moderate, positive correlations between acculturative stress and mental health variables such as internalizing symptoms and conduct and hyperactivity problems externalizing symptoms (Oppedal et al., 2005).

Studies featuring both Latino and Asian immigrant youth reported similar results, citing that distress caused by acculturation has significant predictive ability for depressive symptomology (Mejia & McCarthy, 2010; Yeh, 2003). In a sample of 319 Asian immigrant adolescents, researchers examined the predictive ability of acculturative distress and intercultural competence among other factors for mental health symptoms. Results found that acculturative distress predicted higher levels of mental health symptoms and symptom severity. For this sample, these particular findings indicate that feeling distant or alienated from both cultures, as well as having interpersonal conflicts due to the acculturation process, can lead to mental health problems (Yeh, 2003). Similarly, when examining acculturative stress, college stress, and depression and anxiety

symptoms in Mexican migrant college students, findings of one study revealed positive associations between acculturative stress, migrant status, and depression (Meija & McCarthy, 2010). Rates of depressive symptoms were also higher for both migrant and non-migrant Mexican students than expected in the general population, which may indicate that cultural (specifically acculturation) factors are of importance when addressing mental health outcomes.

For immigrant and refugee adolescents, being a language or cultural broker for parents may be related to family conflict (Trickett & Jones, 2007), though it can also be related to positive outcomes such as greater family adaptability to stressors (Trickett & Jones, 2007; Dorner, Orellana, & Jiménez, 2008). In a study with a sample of 147 Vietnamese adolescents and their parents, researchers examined the effects of adolescent cultural brokering roles on family functioning. Results found that 97% of the sample reported performing at least one cultural brokering behavior. Cultural brokering behavior demonstrated mixed findings, such that it predicted both greater family adaptability and greater familial conflict, as reported by the adolescents. These results may indicate that although cultural brokering can strengthen family interdependence, it can also lead to adverse family functioning, or the perception thereof, for adolescents (Trickett & Jones, 2007).

Though much research has documented the deleterious effects of acculturative stress on mental health outcomes in immigrant adolescents, other studies have found the opposite effect. In a study about the prevalence of culturally-related stress in diverse emerging adults, baseline acculturative stress did not significantly predict depressive

symptoms at follow-up for the overall sample (Polanco-Roman & Miranda, 2013). However, at low levels of ethnic identity, there was a predictive relationship between acculturative stress and symptoms of depression mediated by hopelessness (Polanco-Roman & Miranda, 2013). Research examining the relationship among acculturative stress and suicidal ideation and depressive symptoms in Korean immigrant adolescents yielded similar results. Acculturative stress was only marginally predictive of suicidal ideation and depressive symptoms. When general life stress was taken into account, the association between acculturative stress and the outcome variables was further weakened. Findings from the same study, however, indicated that social support variables, especially living with parents, were associated with lower levels of suicide ideation and psychological symptoms (Cho & Haslam, 2010). Taken together, the research on acculturative stress and mental health outcomes in immigrant and refugee adolescents indicates that acculturative stress-related factors (e.g. perceived discrimination) may be related in some way to negative mental health outcomes (Oppedal et al., 2005; Mejia & McCarthy, 2010; Yeh, 2003; Smokowski et al., 2009; Trickett & Jones, 2007). This relationship however, may be changed when other factors such as social support (Cho & Haslam, 2010), hopelessness, or ethnic identity are taken into account (Polanco-Roman & Miranda, 2013).

As shown above, a number of studies examine the associations between acculturative stress and psychosocial outcomes in adolescent immigrants. However, almost no studies focus exclusively on African adolescent immigrants. Additionally, studies that include ethnically diverse samples often do not document the country of

origin and ethnicity of participants in the Black racial group, further contributing to the gap in the literature as to the specific implications of acculturative stress on the mental health of African immigrant and refugee adolescents. Given the growing population of African immigrants and their unique acculturative experiences, it is imperative for research to be conducted concerning the specific relationship evident in the group between acculturative stress, mental health, and other moderating factors so that more can be understood about the stress-mental health relationship within this particular population.

The Role of Coping Strategies as a Moderator

As coping strategies are characterized as cognitive or behavioral efforts to deal with stress, it follows that the coping literature often examines the association between coping and stressors. The literature further examines this relationship by adding mental health outcomes, and determining how coping strategy use may change the relationship between stress and outcomes. The following sections provide an overview of coping strategies by defining coping strategies, defining coping strategies in childhood and adolescence, and reviewing the current literature on both universal and culturally-relevant coping strategies.

Defining coping strategies. The concept of coping, particularly in the context of childhood and adolescence, has undergone numerous changes in definition and conceptualization over the past thirty years as the research body has grown (Compas, Connor-Smith, Saltzman, Thomsen & Wadsworth, 2001). Lazarus and Folkman (1984) defined coping as " constantly changing cognitive and behavioral efforts to manage

specific internal and/or external demands that are appraised as taxing or exceeding the resources of a person" (pg. 141). Originally derived from Sigmund Freud's ego psychology, coping is now studied empirically and grouped by common cognitive and behavioral strategies (Compas, 1987; Lazarus & Folkman, 1984). Early coping models delineated two categories of coping strategies: problem-focused and emotional-regulation (Compas, 1987; Lazarus & Folkman, 1984). Problem-focused coping strategies are comprised of strategies that act upon the stressor and attempt to change the relationship between the person and the stressful environment. Emotion-focused coping strategies focus on one's reaction to a stressor and include avoiding stressors, cognitively restructuring how one regards stressors, or selectively attending to positive aspects of stressors (Compas, 1987). Individual coping resources (e.g. interpersonal skills, problem-solving skills) influence those coping strategies, as does one's social environment.

Coping in children and adolescents. While Lazarus and Folkman's (1984) definition and model of coping is one of the most widely-accepted conceptualizations of coping and was effective for measuring coping in adults, the model neglects a developmental perspective of the stress and coping process (Compas, 1987; Compas et al., 2001). Indeed, research has shown that the problem-focused/emotion-focused model does not adequately capture the coping strategies used by children and adolescents (Ayers et al., 1991). To ameliorate problems with applying adult models of coping to youth coping, Compas et al. (2001) created a developmentally appropriate definition of coping that could apply to children and adolescents: " conscious, volitional efforts to regulate

emotion, cognition, behavior, physiology, and the environment in response to stressful events or circumstances" (p. 89). Within Compas et al.'s new definition of coping, children's coping strategies are better regarded as malleable and able to develop and change over time, rather than a permanent disposition or trait. More generally, child and adolescent coping is the development of competence in addressing adverse situations, or of dysfunction (Zimmer-Gembeck & Skinner, 2011).

For adolescents especially, studying the use and outcomes of coping strategies is important. Adolescence is a period during which many physical, cognitive, and environmental changes take place, often simultaneously (Ebata & Moos, 1991). Many of these changes, events such as puberty, divorce, and school transitions, can be stressful for youth to experience. Ethnic minority adolescents, in particular, are disproportionately exposed to both acute and chronic life stressors (Ebata & Moos, 1991). Further, experiencing stressors associated with racism or discrimination is a more frequent stressor for visible minority youths than for their White counterparts (Gaylord-Harden & Cunningham, 2009). For African immigrant youth, racial and ethnic discrimination may be frequently encountered and contributes to acculturative stress (McKenney et al., 2006). Furthermore, as noted above, immigrant and refugee youth may experience stressors concerning adjustment to a new culture, familial conflict due migration, and the re-experiencing of pre-migration trauma (Mohamed & Yusif, 2012; Yakushko, 2010). Given that African immigrant and refugee youth will encounter general adolescent stressors, racially-linked stressors unique to ethnic minority youth, as well as stressors

associated with acculturation, it is of importance to identify which coping strategies they employ, and the implications of these coping behaviors for their mental health.

Mainstream coping strategies. In child and adolescent coping literature, various coping strategies have been researched generally without reference to cultural differences in coping. These coping strategies, referred to as universal coping strategies, are the most commonly utilized domains in research detailing volitional efforts to regulate stressors. Compared to the broadband domains of emotion-based and problem-solving coping, which are derived from research on adult coping strategies, empirical research has shown that narrowband domains appear to be more inclusive of the range of thoughts and behaviors that youths draw upon to cope (Ayers et al. 1996). For example, a confirmatory factor analysis conducted by Ayers and colleagues with the Children's Coping Strategies Checklist (CCSC) supported a four-factor model of coping, designating distraction, support-seeking, active, and avoidant coping strategies. Distraction strategies include efforts to avoid stressful stimuli by using other activities or moderate physical exertion. Support seeking strategies encompass both problem-focused and emotion-focused actions that involve seeking assistance, advice, or information from others. Direct problem-solving action, cognitive decision-making, cognitive restructuring, and seeking understanding characterize the active coping factor. The fourth factor, avoidant coping, includes efforts that attempt to stay away from stressful stimuli (behavioral) or prevent thinking about the stressor (Ayers et al., 1996; Compas et al., 2001). A confirmatory factor analysis demonstrated that this four-factor model, assessed with the Children's Coping Strategies Checklist (CCSC; Ayers et al., 1996)

better fit the range of coping strategies used by children than the previous two factor models of active vs. passive and problem-solving vs. emotion-based (Ayers et al.). A further study with an independent sample determined that using the HICUPS (How I Coped Under Pressure) scale resulted in the same findings and the four-factor structure provided an adequate fit (Ayers et al., 1996).

While all four factors of coping can be adaptive in some way, the research finds that some factors are more closely related to positive outcomes. Active coping strategies are largely found to correlate with better outcomes for children and adolescents. Active and problem-solving coping strategies have been correlated with better adjustment and psychosocial functioning (Ebata & Moos, 1991; Clarke, 2006). Lower levels of active coping is also associated with higher anhedonia, a component of depression (Gaylord-Harden, Elmore, Campbell, & Wethington, 2013). Conversely, use of avoidance coping is often seen as maladaptive, correlating with higher levels of depression and anxiety (Gaylord-Harden et al., 2013) and poorer adjustment outcomes (Ebata & Moos, 1991). Distraction coping yields mixed outcomes, and is reported to be effective in dealing with some stressful situations (Compas, 1987), but is positively related to depressive symptoms (Pierre, 2013). The majority of research examining use of distraction coping, however, focuses on stressors that are serious (i.e. illness) or uncontrollable (i.e. community violence) in nature (Zimmer-Gembeck & Skinner, 2011). Finally, while having a network of social support is regarded as a protective factor for adolescents, the buffering effect of support-seeking coping strategies yield mixed findings with some documenting a reducing in the deleterious effects of stressors (Brondolo, ver Halen,

Pencile, Beatty, & Contrada, 2008; Compas, 1987; Noh & Kaspar, 2003) and others finding no correlation with internalizing symptoms (Brondolo et al., 2008; Compas, 1987; Ebata & Moos, 1991; Pierre, 2013).

Coping, acculturative stress, and mental health. Studies across several immigrant and refugee populations demonstrate that there is a correlation between coping and acculturative stress. Qualitative research examining how Asian immigrant adolescents manage acculturative stress identified coping strategies that the participants used as they adapted to their new cultural context. Youth reported that they were able to diminish psychological and emotional distress as a result of drawing upon social support, cultivating positive emotions, and engaging in meaningful activities (Kim, Noh, Kim, & Gopala, 2012). Though this research was qualitative, the themes that emerged from the adolescents' experience are congruent with some of the adaptive strategies found in universal coping.

As in research with general life stressors, adaptive coping strategies (e.g., active and support-seeking strategies) are associated with more positive outcomes in research on acculturative stress. In a sample of Mexican American college students, acculturative stress was associated with more depressive and anxious symptoms, but active coping predicted lower depression in the sample. At high levels of acculturative stress, active coping acted to buffer the relationship between stress and mental health (Crockett, Iturbide, Torres Stone, McGinley, Raffaelli, & Carlo, 2007). Similar results were revealed in a sample of Korean immigrants where support-seeking coping was associated with fewer depressive symptoms. Active, problem-solving coping also yielded positive

outcomes and was seen to moderate the effect of perceived discrimination on mental health (Noh & Kaspar, 2003). In a study of Mexican-origin adolescents, researchers examined the stress-buffering effects of active coping on the association between family stress and internalizing symptoms. Results revealed that at low levels of family stress for boys, active coping strategies moderated internalizing symptoms (Liu, Gonzales, Fernandez, Millsap, & Dumka, 2011). The stressors faced by these adolescents were especially related to challenges regarding their traditional cultural norms about family. These stressors may be similar in nature to those faced by other immigrant, or immigrant-descended groups (i.e. African immigrant adolescents).

Similarly, negative psychological outcomes are associated with use of maladaptive coping strategies in response to acculturative stress. Increases in use of maladaptive coping strategies were associated with increases in acculturative stress. Within the same sample of Haitian immigrants, as reported use of maladaptive coping increased, perceived quality of life decreased (Belizaire & Fuertes, 2011). In research with immigrant populations, use of avoidant coping and emotion-focused coping (compared to active and problem-focused coping) both predicted poorer adjustment to acculturative stress, and increased depressive symptoms (Crockett et al., 2007; Noh & Kaspar, 2003). Emotion-focused coping in particular yielded negative mental health outcomes when individuals in a sample of Korean immigrants experienced perceived discrimination (Noh & Kaspar, 2003). Research on the adaptiveness of coping with acculturative stress is generally limited to Latino and Asian immigrant populations, with little research investigating outcomes with African immigrants and refugees. As noted

above, unique challenges associated with race and ethnicity may add to the burden of acculturative stress faced by African immigrants, making further research with this group essential to understanding the stress-coping relationship.

Culturally-relevant coping. The four-factor model of coping identified by Ayers et al. (1996) has been used in research with ethnic minority youth, but the suitability of the model for these populations has shown mixed results. For African American youth in particular, use of the four-factor model has yielded varied results. In a study investigating coping strategies used by low-income, urban African American adolescents, researchers used the Children's Coping Strategies Checklist (CCSC) in a confirmatory factor analysis of the Ayer's four-factor model. Results found that the model was not replicated in the sample, and rather the data were better represented using a three-factor model. The revised three factor model omitted the physical release component of distraction coping, and loaded the remaining distraction coping strategies under avoidant coping, thus producing three factors: avoidant, support-seeking, and active coping strategies (Gaylord-Harden, Gipson, Manace, & Grant, 2008). In other research attempting to replicate the four-factor model in low-income, African American youth, the same problem with the model was evident. Gaylord-Harden and colleagues found that rather than active and avoidant coping strategies forming distinct factors, they shared some features (Gaylord-Harden, Cunningham, Holmbeck, & Grant, 2010). Given the difficulty in replicating the four-factor structure of coping with ethnic minority youth, it may be that these youths draw upon other unique and culturally-relevant coping strategies that are not captured on existing measures of universal coping strategies.

Indeed, the majority of coping research and the development of coping measures has been conducted primarily with white, middle-class samples with low representation of racial and ethnic minority children (Utsey, Brown, & Bolden, 2004; Compas et al., 2001). As noted above, when the factor structures of existing coping measures have been tested within ethnic minority samples, researchers have frequently been unable to replicate the same structure (e.g., Gaylord-Harden et al., 2008; Tolan, Gorman-Smith, Henry, Chung, & Hunt, 2002). This discrepancy could be due to the lack of representation in the original measure development, and could indicate that some ethnic minority groups utilize coping strategies that are not represented within those measures. Both contextual and cultural factors such as community social norms and collectivist worldview, could account for these differences, and their inclusion may provide better insight into the understanding of coping strategies used by diverse youth (Noh & Kaspar, 2003; Beru, 2002).

Culturally-relevant coping strategies attempt to take into account cultural and contextual factors that may affect the manifestation and utilization of coping strategies. Culturally-relevant coping strategies are derived from a particular cultural worldview or orientation (Noh & Kaspar, 2003). For example, for those of African descent, culturally-relevant coping is based in an Afrocentric worldview and philosophical framework (Utsey, Adams, & Bolden, 2000). Additional research on the utility and function of culturally-relevant strategies may help researchers to understand the breadth of strategies used by ethnic minority youth coping with acculturative stress. In a study exploring the coping strategies of Korean immigrant adolescents dealing with acculturative stress,

researchers asked open-ended questions and then used thematic analysis to capture the role of youths' culture on their coping. Three themes, engagement in meaningful activities, social support, and positive emotion, emerged from the findings. Participants reported that these strategies, guided by collectivistic and family-oriented values, led to a greater sense of happiness and psychological well-being (Kim et al., 2012).

An additional qualitative study that focused on African (emerging adult) immigrants to the United States identified means of coping informed by both the immigration context and African culture (Beru, 2002). In response to immigration-related challenges, African immigrants reported creating new communities and social networks and maintaining cultural practices and values (Beru, 2002). The formation of these communities offered both a way to preserve the Africultural value of communal belonging, and a means through which these immigrants could find others that "validate[d] their sense of self and ways of being, " (Beru, 2002, p. 66). In sum, this research suggests that immigrant and refugee populations may be more likely to draw upon more culturally-relevant strategies than mainstream strategies when coping with a unique stressor like acculturation. As African immigrants and refugees may draw upon an African/Afro-centric worldview to design coping strategies to diminish stress (Beru, 2002; Kamya, 1997), exploring existing frameworks that use the same foundation is important in understanding how these populations cope with stressors.

Afrocentric cultural values are derived from a worldview that is rooted in African philosophies and cultural traditions (Chambers, Kambon, Birdsong, Brown, Dixon & Robbins-Brinson, 1998). Communal interaction or collectivism, spirituality, harmony

and balance, and emotional debriefing (affect) comprise the principal features of the Afrocentric orientation (Jagers & Mock, 2003; Ogbonnaya, 1994). Collectivism or communalism is characterized by a belief in connectedness among people, and an emphasis on group interdependence. The adage "I am because we are," is often used to demonstrate the derivation of one's identity from a social, rather than individual, context, capturing the principle of collectivism (Jagers & Mock, 2003; Ogbonnaya, 1994). Spirituality, often manifested in religious practices, refers to a belief in an omnipotent being, or presence of a life force or spirit within all living things. While religion may be a way of expressing spirituality, it need not be present for spirituality to be observed (Jagers & Mock, 2003; Ogbonnaya, 1994). Emotional expressiveness through creative means, and sensitivity toward the attitudes and emotions of others defines emotional debriefing or affect. Finally, harmony and balance is represented by a commitment to justice and equality, as well as an appreciation of a natural "balance" of the world (Chambers et al., 1998; Ogbonnaya, 1994).

The relative lack of items assessing culturally-relevant coping on existing coping measures has spurned the creation of culturally-relevant coping inventories that attempt to capture the scope of these strategies. One of these measures is the Africultural Coping Systems Inventory (ACSI), developed to assess the various coping strategies utilized by people of African descent (Utsey et al., 2004). Along the same lines, the development of the Youth Africultural Coping Systems Inventory (Y-ACSI) was guided by the ACSI and created to capture the unique coping strategies used by African American adolescents (Gaylord-Harden & Utsey, 2007, unpublished manuscript).

In a study evaluating the relationship between culturally-relevant coping strategies and resilience, researchers found that the coping strategies within the ACSI (i.e. cognitive/emotional debriefing, spiritual-centered, collective, and ritual coping) were predictive of higher quality of life, beyond traditional protective factors such as family cohesion and social support (Utsey, Bolden, Lanier, & Williams, 2007). Additionally, the literature suggests that particular stressors, namely racism-related stress, may predict the use of Africultural coping strategies. For women, institutional racism-related stress correlated with increased use of spiritual-centered, collective, and cognitive-emotional debriefing coping (Lewis-Coles, Ma'at, & Constantine, 2006). When men in this sample were faced with cultural racism-related stress, they tended to respond using higher levels of collective coping strategies (Lewis-Coles, et al, 2006). Similarly, discrimination stress for African-American youth predicted the use of emotional debriefing, spiritual coping, and communalistic coping significantly, whereas it was not related to use of universal coping strategies (Gaylord-Harden & Cunningham, 2008). Though the Y-ACSI factors are derived from Afrocentric cultural values, the measure has not yet been used within African immigrant or refugee samples. Thus, the current study will extend the scope of research on culturally-relevant coping by including the Y-ACSI with this sample.

Gender Differences in Acculturative Stress, Coping, and Mental Health Outcomes

The literature reviewed above evinces the impact that acculturative stress has on the psychological outcomes of immigrant and refugee adolescents. Given the adaptive nature of both mainstream and culturally-relevant coping strategies, these strategies may act as a buffer of the stress-mental health relationship. However, it is necessary to

consider the effect that gender may have on these variables. Findings on gender differences regarding acculturative stress, coping strategy use, and mental health outcomes will be discussed in the follow sections.

Effects of gender on acculturative stress. Research suggests that children and adolescents' experiences of acculturative stress may vary by gender. For example, certain acculturative stress-related tasks such as language/cultural brokering are affected in frequency by gender. Some research suggest that female children and adolescents are more likely than their male counterparts to take on the duty of brokering in their families or community (Buriel, Perez, DeMent, Chavez, & Moran, 1998). Other studies, however, document higher reports of acculturative stressors and higher perceived "stressfulness" for boys compared to girls (Romero, Caravajal, Valle, & Orduna, 2007) or a lack of differences in acculturative stress levels between boys and girls (Mena, Padilla, & Maldonado, 1987).

Gender may also change the relationship among acculturative stress and outcomes. In a study examining the relationship among acculturative stress, coping strategies, and psychological outcomes with Mexican American college students, results indicated that there was a significant interaction between gender and acculturative stress. For boys, as self-reported acculturative stress increased, anxiety symptoms increased, whereas for girls, there was no significant relationship among variables (Crockett et al, 2007).

In a study examining the relationship between bicultural stress (acculturation stress with both home and host culture) and depressive symptoms among Latino, Asian

American, and European American adolescents, there was a significant interaction between gender and bicultural stress. While bicultural stress was already a significant predictor of depressive symptoms, being female increased that risk (Romero et al., 2007). Additionally, for females, higher bicultural stress was associated with lower levels of optimism; however, this relationship was insignificant for male adolescents (Romero et al., 2007).

Effects of gender on coping. Generally speaking, youth use all four universal coping strategies to deal with stressors, although gender affects the frequency of use and its outcomes. Female adolescents tend to use more support-seeking methods to deal with stressors, and may also use more problem-solving than do males (Brodzinsky, Elias, Steiger, Simon, Gill, & Hitt, 1992). Some research also suggests that when dealing with social or peer related stressors, girls again will use more support-seeking methods of coping, which is consistent with the idea that females are socialized to value interpersonal relationships and use them as forms of support (Eschenbeck, Kohlmann, & Lohaus, 2007). Girls, especially older adolescents, also utilize a wider range of coping strategies than do boys (Brodzinsky et al., 1992; Compas et al., 2001).

Gender effects are also present in the literature that examines coping with immigrant youth. In a study with Mexican-origin youth, the usually stress-buffering effect that active coping has on internalizing symptoms was present primarily in girls. Boys only benefitted from the buffering effect when they were faced with low levels of family stress. At high levels of family stress, when boys used distraction strategies or support-seeking strategies, they experienced higher levels of internalizing symptoms (Liu

et al., 2011). In regard to culturally-relevant coping, though there have been few studies examining gender differences, it has been documented that female African American youth report greater use of spiritual coping (Molock, Puri, Matlin, & Barksdale, 2006) and communalistic coping (Pierre, 2013).

Effects of gender on mental health. Given that acculturative stress impacts mental health functioning, it is important to understand how gender may play a role in the manifestation of mental health symptoms. The literature on gender effects on internalizing symptoms is well documented in the general population. Girls have been found to display more depressive symptoms (Chorpita, Moffitt, & Gray, 2005; Handwerk, Clopton, Huefner, Smith, Huff, & Lucas, 2006;) and more anxiety symptoms (Chorpita et al., 2005; Zakaryan, 2013) than do boys. African American girls may report more symptoms associated with anxiety/depression (Pierre, 2013; Gaylord-Harden & Cunningham, 2008). Similar patterns emerge as well with ethnic minority, immigrant, and refugee adolescents. With refugee and immigrant adolescents, conflict between changing gender roles may result in more internalizing symptomology in girls (Choi, 2002). Among refugees, higher levels of anxiety, depression, and PTSD symptoms were found in girls when compared to boys over time (Lustig et al, 2004).

Age Differences in Acculturative Stress, Coping Strategy Use, and Mental Health Outcomes

The period of adolescence is one marked with significant change in multiple life domains including cognitive and social. Given these changes, adopting a developmental

approach in examining variables upon which age may have an effect is necessary for understanding the stress, coping, and mental health relationship.

Effects of age on acculturative stress. As children and adolescents age, the role of acculturative stress in their lives may begin to change. Older children, for instance, may report experiencing more culturally-related stressors than their younger counterparts (Romero & Roberts, 2003). Older adolescents may not only be exposed to more racial discrimination, but they also may be more aware of its presence, which might increase their levels of acculturative stress (Yeh, 2007). In adolescence, youth begin seeking and exercising autonomy from their parents and caregivers. This behavior is developmentally appropriate; however, the resulting dissonance between parents and children are influenced by cultural norms (Kwak, 2003). Individualistic cultures in which age comes with more independence may be at odds with collectivistic values where older adolescents may not be expected to seek autonomy in the same ways (Kwak, 2003). Despite the patterns that emerge with regard to age, research comparing the presence and effects of acculturative stress among younger and older adolescents is lacking. It is therefore important to determine if there are differences in the relationship between acculturative stress and outcomes when taking youths' age into consideration.

Effects of age on coping. Since coping research with youth has taken on a developmental perspective, research has found that the four-factor model of coping is a better representation of the universal coping strategies that children and adolescents draw upon than the two-factor models used with adults (e.g., problem-focused versus emotion-focused). However, the ability to use these strategies and the frequency that they are

used are affected by age as children and adolescents develop cognitively and socially (Compas et al., 2001; Zimmer-Gembeck & Skinner, 2011). Furthermore, the coping strategies used may also vary according to the type of stressor an adolescent is facing across age group (Fields & Prinz, 1997; Griffith, Dubow, & Ippolito, 2000). For example, older children (aged 7-12) tended to use high levels of support-seeking and emotion-focused coping (Fields & Prinz, 1997). While active strategies seemed to increase as children aged, the results concerning distraction strategies were mixed. Younger adolescents tended to use distraction strategies that were behavioral in nature, and began using more cognitive strategies as they aged (Fields & Prinz, 1997).

In other studies examining coping strategy use across grade levels, results indicated that sixth graders (aged 10-11 years) used more avoidance strategies than did eighth graders (aged 12-13 years). Sixth graders also used a greater variety of strategies when compared to their eighth grade counterparts (Brodzinsky, et al., 1992). Similarly, when comparing seventh, ninth, and twelfth graders on their coping responses to peer-related stressors, younger adolescents (e.g. seventh graders aged 11-12 years) reported using less active or approach coping strategies than did high school age adolescents. Similar patterns were observed when examining responses to family and school stressors among the three grade levels. When dealing with family stress, both seventh and ninth graders used more avoidance coping than active/approach strategies. This difference, however, was not present in the older cohort of twelfth graders (aged 17-18 years; Griffith, Dubow, & Ippolito, 2000). Furthermore, as grade level increased, so did the reported use of active/approach coping strategies, while employment of avoidance

strategies remained the same (Griffith et al., 2000). When youth faced school-related stressors, it was the older adolescents who used more approach strategies than avoidance. Unlike for peer and family stressors where use of avoidance seemed to decrease as cohort age increased, ninth graders, the middle cohort, reported the highest use of avoidance with school stressors (Griffith et al., 2000). Also during adolescence, youth begin to expand their social networks from only family members as peer relationships become more salient thus creating more avenues for social support (del Valle, Bravo, & López, 2010; Skinner & Zimmer-Gembeck, 2007).

Altogether, findings on the development of coping strategies reveal several patterns of change throughout late childhood and adolescence. As youth age, their use of active/approach coping strategies, as well as cognitive (compared to behavioral) strategies increases while frequency of emotion-focused strategies decreases (Fields & Prinz, 1997). Although they generally decrease in terms of usage, emotion-focused and avoidance strategies do not completely disappear. Rather, adolescents begin drawing from a wider range of coping strategies to address various stressors as they develop (Brodzinsky et al., 1992; Zimmer-Gembeck & Skinner, 2011).

The Current Study

The purposes of the current project are to (1) examine the association between acculturative stress and outcomes, and (2) examine the role of both mainstream and culturally-relevant coping strategies as a moderator of the association between acculturative stress and mental health outcomes in African immigrant and refugee youth. Although existing research highlights the experience of acculturation stress in immigrant

and refugee populations, as well as the deleterious impact of acculturation stress on mental health outcomes, the literature on the presence and impact of acculturative stress on adolescent immigrants and refugees, especially adolescents from African countries is lacking. As the number of African immigrants and refugees continues to increase, and African immigrant adolescents face stressors attributed to their immigration status, racial group, and ethnic groups, it is imperative for researchers to better understand their unique acculturation experiences. The current study seeks to address this limitation by focusing specifically on African immigrant and refugee youth.

Though youth may experience acculturative stressors, research suggests that the use of particular coping strategies may have an effect on these outcomes. Use of culturally-relevant coping strategies is also of interest given that other immigrant and ethnic minority populations suggest that these strategies may buffer detrimental effects of stress. Currently, there is very little research on the use and effectiveness of coping strategies on acculturation stress in this population though research suggests that coping may be a useful strategy in buffering negative mental health outcomes. Much of the existing research in culturally-relevant strategies with immigrant and refugee populations is qualitative in nature, and no studies to-date with this population include quantitative assessment of both mainstream and culturally-relevant coping strategies. The inclusion of a quantitative examination of culturally-relevant coping strategies in this study will further expand our knowledge on the scope of coping with this specific population and how it buffers the effects of acculturative stressors.

Based on the existing literature, the hypotheses and research questions for the current study are as follows:

1. Hypothesis 1: Acculturative stress will be significantly related to internalizing symptoms and externalizing symptoms such that higher acculturative stress (objective and perceived) levels will predict higher levels of internalizing and externalizing symptoms. Immigration status will moderate this relationship such that for refugees, this relationship will be stronger than for immigrants.
2. Research Question 1: Does acculturative stress (objective and perceived) predict the use of culturally-relevant coping controlling for mainstream coping strategies and does status affect this relationship?
3. Hypothesis 2: Universal coping strategies will moderate the relationship of acculturative stress (objective and perceived) to internalizing and externalizing symptoms.
    a. Active coping strategies will moderate the relationship between acculturative stress and outcomes such that, at high levels of active coping, as stress increases, internalizing symptoms and externalizing symptoms will decrease.
    b. Support seeking coping strategies will moderate the relationship between acculturative stress and outcomes such that, at high levels of support seeking coping, as stress increases, internalizing symptoms and externalizing symptoms will decrease.
    c. Avoidant coping strategies will moderate the relationship between acculturative stress and outcomes such that, at high levels of avoidant coping,

as stress increases, internalizing symptoms and externalizing symptoms will increase.

4. Hypothesis 3: Communalistic coping strategies will moderate the relationship between acculturative stress (objective and perceived) and outcomes such that, at high levels of communalistic coping, as stress increases, internalizing symptoms and externalizing symptoms will decrease.
5. Research Question 2: Will the remaining culturally-relevant coping strategies (i.e., maintaining harmony, emotional debriefing, and spiritually centered coping) moderate the relationship between acculturative stress (objective and perceived) and internalizing (anxiety/depression) and externalizing symptoms such that higher levels of coping use are related to lower levels of internalizing symptoms and externalizing symptoms?

CHAPTER THREE

METHODS

Participants

The sample for the current study was comprised of 14 African immigrant or immigrant-descended (n = 7) and refugee (n = 7) adolescents between the ages of 11-18 (M = 14.65, SD = 2.31). There were nine males and five females. Data collection for the project is ongoing. Participants were recruited from the Pan-African Association, a community-based organization located in Chicago, Illinois that serves immigrants and refugees of African descent in the metropolis area and International Central Gospel Church-Chicago (ICGC). For the purpose of the current study, the Pan-African Association participants are comprised of immigrants and refugees originating from Guinea-Conakry, Burundi, and Democratic Republic of the Congo. ICGC participants were immigrant or immigrant-descended adolescents from Ghana and Togo.

Materials

Acculturative stress and acculturative stressors. *The Acculturative Hassles Inventory* (Vinokurov, Trickett, & Birman, 2002) was used to collect participant information on acculturative stress and stressors. The Acculturative Hassles Inventory has a measure of frequency and of severity. The frequency questions are answered on a modified scale of to indicate what stressors are present for the participants. The severity measure is used to assess acculturative stress. The Acculturative Hassles Inventory is a

39-item measure on which participants were asked to read acculturation-related items (e.g. "You heard people saying bad things or making jokes about Africans, or people of your ethnic group") and rate their response on a 0 (does not apply) to 4 (a very big hassle) Likert scale and indicate whether the stressor 0 (never happened) to 6 (happened more than 10 times) in the past three months. The measure is made up of acculturative hassles in the discrimination-school, peer, English language, and family domains. The Acculturative Hassles Inventory has shown acceptable validity and has been used successfully with adolescents of the same age group (Vinokurov, Trickett, & Birman, 2002) See Appendix A. Reliability within the current sample was sufficient (acculturative stress $\alpha = .88$; acculturative stressors $\alpha = .86$).

Culturally-relevant coping. The participants completed the *Africultural Coping Systems Inventory – Youth Version* (*Y-ACSI*; Gaylord-Harden and Utsey, 2007, *unpublished manuscript*) as a measure of culturally related coping strategies for African Americans. The Y-ACSI was developed from an adult version coping inventory designed for use with people of African descent to examine unique cultural coping styles. The Y-ACSI has 54 items rated on a Likert Scale from 1 (not at all) to 4 (used a lot) and is divided into four factors: Emotional Debriefing, Spiritual Centered, Maintaining Harmony, and Communalistic Coping. The Emotional Debriefing factor is characterized by creative expression or emotion-based management of stress "write poetry, raps/rhymes, songs, short stories." Spiritual Centered coping attempts to use spiritually-based strategies in trying to manage stress "I ask God for strength." Attempts in Maintaining Harmony cope by trying to bring about harmonious balance among others

and with environmental stimuli "when things don't go my way, I just accept the way things are." The final factor, Communalistic Coping, represents interdependence with others (friends, family, etc.) to cope with situations "spend time around my family," (Gaylord-Harden and Utsey, 2007). Higher scores represent higher levels of coping. For the purposes of this study, the four-factor model was used to examine culturally-relevant coping. Reliability for this scale has been established in previous studies (Pierre, 2013). Within the current sample, the reliability is as follows: emotional debriefing α = .46; spiritual centered α = .39; maintaining harmony α = .87; communalistic α = .72.

Mainstream coping. Youth also completed the *How I Coped Under Pressure Scale* (*HICUPS*; Program for Prevention Research, 1999) to measure mainstream coping strategies. The HICUPS consists a prompt where youth are asked to identify a recently experienced problem (related to acculturative stress for the purpose of this study), followed 54 items of coping strategies on which participants must rate their frequency of use from 1 (never) to 4 (most of the time). The items are categorized into four factors: distraction strategies (e.g. "listened to music"), avoidance strategies (e.g. "avoided the people who made you feel bad"), active coping strategies (e.g. "did something to make things better"), and support-seeking (e.g. "told other people what you wanted them to do") strategies (Program for Prevention Research, 1999). This study used the four factor scores when examining mainstream coping. Higher scores represent higher levels of coping. This measure has been found to have good test-retest reliability and construct validity (Ayers et al., 2006). Internal consistencies for the subscales were adequate (distraction α = .77; avoidant α = .68; active α = .60; distraction α = .78).

Exposure to war. Participants were asked to complete a brief assessment of exposure to war in their home country using the World Health Organization's Adverse Childhood Experiences International Questionnaire (ACE-IQ), Exposure to War/Collective Violence subscale. The measure consists of four questions asking participants to indicate whether war-related events happened to them as a child *Never* to *Many Times*. Participants could also choose "I prefer not to answer."

Post traumatic stress symptoms. Post-traumatic stress symptoms were assessed in participants using the *Child Post-Traumatic Stress Scale* (CPSS; Foa et al., 2001). The CPSS is made up of 17 items that assess the presence of post-traumatic stress symptoms over the past two weeks in reference to a traumatic life event. Participants were asked to indicate whether they experienced symptoms such as "having a bad dream or nightmare" on a 0 (not at all or only one time) to 3 (five or more times in a week/almost always) scale (Foa et al., 2001). The measure also asks about functional impairment (e.g. "Having trouble falling or staying asleep ") as a result of the traumatic event. The CPSS has been shown to have acceptable reliability and was created for children aged 8 to 18 (Foa et al., 2001). Internal consistency was sufficient in the current sample ($\alpha = .82$).

Internalizing and externalizing behavior. Dependent mental health outcomes were assessed using the *Youth Self Report* (*YSR*, Achenbach & Rescorla, 2001). The YSR is comprised of 112 items categorized into 16 subscales that assess a range of mental health problems. The items can also be categorized into broadband subscales assessing internalizing problems (e.g. "There is very little that I enjoy") and externalizing problems (e.g. "I destroy things belonging to others"), as well as total problems. For the

purposes of this study, the anxious/depressed subscale was used to represent internalizing symptoms, and the aggressive behavior subscale will be used to represent externalizing symptoms. The two-factor structure was used to examine mental health outcomes in the adolescents. The factor structure of the YSR has been tested in a range of populations worldwide and it has shown good psychometric properties (Ivanova et al., 2007)**.** The internal consistence for the YSR subscales were adequate (internalizing problems $\alpha = .83$; externalizing problems $\alpha = .87$).

Demographic information. Demographic information was collected, including the participant age, gender, country of origin, ethnicity, generational/immigration status, age at immigration, primary language, and school.

Procedure

Before beginning data collection, researchers from Loyola University Chicago presented an overview of the project and distributed parental consent forms at the Pan African Association's citizenship, health and wellness, and English Language Learning meetings and ICGC's Sunday services. Association and church members were also told that they could forward the call for participants to interested parents whose children are eligible. Participants recruited through word-of-mouth were told to contact the Loyola researcher for more study details and parental consent forms.

Participants with parental consent were asked to attend a data collection session taking place at the Pan-African Association center or at International Central Gospel Church-Chicago. Youth received an assent form discussing the study objectives, procedures, limits to confidentiality, and voluntary nature of the study, which the

researchers read aloud to participants. After written assent was obtained, participants were given a packet of measures to complete in a group format. Packet completion lasted between 45 minutes and one hour and research assistants were present to assist with the completion of the surveys. The youth were compensated for their time with a ten-dollar Target gift card.

CHAPTER FOUR

RESULTS

The results of the current study are presented in four parts; once for the results of objective acculturative stressors and once for the results of perceived acculturative stress: First, descriptive information is provided. Correlational analyses are presented for all continuous study variables and frequencies are presented for dichotomous variables. Second, t-test results determining significant differences in level of post-traumatic stress symptoms between immigrants and refugees are presented. Third, the results of the simultaneous multiple regressions used to test whether acculturative stress predicts the use of culturally-relevant coping strategies are reported. Fourth, the results of regression analyses with moderation demonstrating whether mainstream and culturally-relevant coping strategies changes the relationship between acculturative stress and outcomes (i.e. internalizing and externalizing symptoms) are reported.

Descriptive Analyses and Correlational Analyses

Frequencies revealed that an equal number of participants' families moved to the United States as refugees and as immigrants. The majority of participants came to the United States themselves, along with parent(s) or grandparents. All participants were either born in the United States or moved to the United States. The frequencies and percentages for categorical demographic variables are presented in Table 1.

An independent samples t-test revealed that refugees (M = 16.00, SD = 3.51) and immigrants (M = 7.86, SD = 6.99) differed in their levels of post-traumatic stress symptoms ($t(12) = 2.75$, $p = .02$. T-tests revealed no other significant differences between immigrants and refugee on predictor or outcome variables. Results are presented in Table 1.

Table 1. Frequencies of Demographic Variables

Gender		**Reason for Move**		**Generation Status**		
Male	Female	Refugee	Immigrant	Came to U.S.	First Generation	Second Generation
9	5	7	7	10	4	0
64.3%	**35.7%**	**50.0%**	**50.0%**	**71.4%**	**28.5%**	-

Correlation analyses revealed that communalistic coping was significantly correlated with all other coping variables with the exception of maintaining harmony. A significant positive relationship was present between acculturative stress and spiritually-centered coping strategies. Additionally, the acculturative stressors variable showed a trend in its correlation to both outcome variables. A significant positive relationship between internalizing and externalizing symptoms emerged. Correlational and descriptive analyses including means and standard deviations were conducted for all continuous study variables and are presented in Table 2.

Table 2. Descriptive Statistics and Intercorrelations Among Continuous Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1.Active coping	--											
2. Distraction coping	.19	--										
3. Avoidant coping	.73*	.20	--									
4. Support-seeking coping	.43	.44	.06	--								
5. Spiritual-centered coping	.53^	.07	.41	.50^	--							
6. Maintaining harmony	.48^	-.03	.43	.15	.31	--						
7. Emotional debriefing	.50^	.73**	.58*	.37	.33	.33	--					
8.Communalistic coping	.71**	.63*	.56*	.54*	.59*	.27	.67**	--				
9. Internalizing	.18	.19	.28	.21	.46	.67**	.29	.45	--			
10. Externalizing	.06	.04	-.05	.21	.40	.39	.00	.36	.83**	--		

11. Acculturative Stress												
	.26	-.08	.16	.30	.66*	.43	-.10	.26	.43	.38	--	
12. Acculturative Stressors												
	.12	.51^	.05	.46	.02	.30	.15	.53^	.50^	.51^	.38	--
Mean	55.00	19.14	26.07	15.29	16.86	18.07	23.21	20.00	15.00	12.00	33.71	37.50
SD	14.04	5.79	5.17	5.77	3.46	5.62	4.17	5.32	7.90	7.93	17.91	20.13

*p<.05, **p<.01 ^.05<p<.09

Results Using Objective Stressors as a Predictor

Hypothesis 1. Hypothesis 1 predicted that objective reports of acculturative stress would be related to internalizing and externalizing symptoms such that as stress increases, symptoms also increase. To determine this relationship, two simultaneous multiple regression models were tested using internalizing and externalizing symptoms as outcomes. In step 1, age and gender were entered as predictors to control for their potential effects on outcomes. Acculturative stress and status (immigrant vs. refugee) was then entered in step 2. Inconsistent with Hypothesis 1, the analysis revealed no significant relationship between objective acculturative stress level and internalizing symptoms (β = .51, p = .11) or with externalizing symptoms (β = .56, p = .16). See Tables 3-4 for results.

Table 3. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Internalizing Symptoms

	B	SE B	β
Model 1			
Gender	1.30	5.22	.08
Age	1.13	1.13	.33
Model 2			
Gender	12.48	5.50	.79
Age	-2.23	1.38	-.65
Obj. Acc. Stress	.24	.10	.60
Status	-19.72	7.64	-1.29
Model 3			

Gender	13.83	5.87	.87
Age	-2.54	1.47	-.74
Obj. Acc. Stress	.02	.29	.05
Status	-20.97	7.96	-1.38
Status X Acc. Stress	.18	.23	.62

Note. $R^2 = .09$, $p = .60$ for Model 1, $R^2 = .58$, $p = .03$ for Model 2, $R^2 = .37$, $p = .45$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 4. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Externalizing Symptoms

	B	SE B	β
Model 1			
Gender	1.13	5.28	.07
Age	1.06	1.14	.31
Model 2			
Gender	7.39	6.88	.46
Age	-.97	1.73	-.28
Obj. Acc. Stress	.22	.12	.57
Status	-9.75	9.55	-.64
Model 3			
Gender	7.55	7.62	.47
Age	-1.01	1.90	-.29
Obj. Acc. Stress	.20	.38	.50
Status	-9.90	10.34	-.65
Status X Acc. Stress	.02	.30	.08

Note. $R^2 = .08$, $p = .64$ for Model 1, $R^2 = .35$, $p = .20$ for Model 2, $R^2 = .35$, $p = .94$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Research question 1. The first research question examines whether acculturative stress levels predict the use of culturally-relevant coping controlling for mainstream coping strategies and if immigration status moderates those relationships. First, all continuous variables were centered to be used within the analysis. To test this question, a multiple regression was performed with the acculturative stress variable (objective) and immigration status predicting each of the four culturally-relevant coping strategies. Age and gender were entered in step 1 as predictors to control for their potential effects on outcomes. A total score for mainstream coping strategies (i.e., active, avoidant, support-seeking, and distraction) was computed and entered in step 2 as a predictor to control for the effects of mainstream coping. Objective acculturative stress and immigration status were entered in step 3 to examine main effects. Finally, an interaction term between objective acculturative stress and immigration status was entered in step 3. A total of 4 regression analyses were conducted, one for each culturally-relevant coping strategy as an outcome.

Consistent with predictions, objective acculturative stress was related to use of communalistic coping ($\beta = .35$, $p = .03$) in the second step of the model. This effect was lost in the fourth step and the interaction between status and objective acculturative stress was not significant. Contrary to predictions, analyses revealed no significant main effects of objective acculturative stress level ($\beta = .56$, $p = .52$) and immigration status ($\beta = -.36$, $p = .65$) in predicting emotional debriefing and no significant interactions. Analyses revealed a main effect for immigration status ($\beta = -1.56$, $p = .01$) predicting use of

spiritually-centered coping. Finally, there was a trending main effect of status (β = -1.35, p = .08) and trending interaction between status and objective stress (β = 1.65, p = .08) when predicting use of maintaining harmony coping. Post-hoc analysis demonstrated that for immigrants, objective acculturative stress is related to use of maintaining harmony coping at a trend level (β = 1.21, p = .099). Results for culturally relevant coping strategies are shown in Tables 5-8.

Table 5. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Communalistic Coping

	B	SE B	β
Model 1			
Gender	2.46	1.75	.23
Age	.98	.42	.42
Mainstream Coping	.15	.04	.66
Model 2			
Gender	4.32	2.52	.40
Age	.55	.49	.24
Mainstream Coping	.13	.04	.56
Obj. Acc. Stress	.09*	.04	.35*
Status	-1.83	3.34	-.18
Model 3			
Gender	-3.11	2.80	.40
Age	.56	.54	.24
Mainstream Coping	.13	.04	.56

Obj. Acc. Stress	.10	.11	.37
Status	-1.79	3.66	-.17
Status X Acc. Stress	-.00	.08	-.02

Note. $R^2 = .81$, $p = .001$ for Model 1, $R^2 = .90$, $p = .08$ for Model 2, $R^2 = .90$, $p = .96$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 6. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Emotional Debriefing Coping

	B	SE B	β
Model 1			
Gender	-1.14	2.24	-.14
Age	-.09	.53	-.05
Mainstream Coping	.13	.05	.73
Model 2			
Gender	1.09	4.26	.13
Age	-.43	.82	-.24
Mainstream Coping	.11	.06	.59
Obj. Acc. Stress	-.00	.06	-.02
Status	-3.85	5.66	-.48
Model 3			
Gender	.13	4.58	.02
Age	-.25	.88	-.14
Mainstream Coping	.11	.07	.62
Obj. Acc. Stress	.12	.17	.56
Status	-2.88	5.97	-.36

Status X Acc. Stress	-.10	.14	-.66

Note. $R^2 = .51$, $p = .06$ for Model 1, $R^2 = .54$, $p = .78$ for Model 2, $R^2 = .57$, $p = .48$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 7. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Spiritually Centered Coping

	B	SE B	β
Model 1			
Gender	3.66	1.84	.53
Age	.75	.44	.50
Mainstream Coping	.05	.04	.31
Model 2			
Gender	9.97*	2.16	1.43*
Age	-.25	.42	-.16
Mainstream Coping	-.02	.03	-.16
Obj. Acc. Stress	.01	.03	.05
Status	-10.61	2.87	-1.59
Model 3			
Gender	9.77*	2.40	1.40*
Age	-.21	.46	-.14
Mainstream Coping	-.02	.03	-.15
Obj. Acc. Stress	.03	.09	.19
Status	-10.42*	3.13	-1.56*
Status X Acc. Stress	-.02	.07	-.16

Note. $R^2 = .52$, $p = .05$ for Model 1, $R^2 = .83$, $p = .02$ for Model 2, $R^2 = .83$, $p = .79$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 8. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Status on Maintaining Harmony Coping

	B	SE B	β
Model 1			
Gender	-4.79	3.61	-.42
Age	-.70	.86	-.29
Mainstream Coping	.14	.08	.56
Model 2			
Gender	2.60	6.27	.23
Age	-1.98	1.21	-.81
Mainstream Coping	.05	.09	.22
Obj. Acc. Stress	.05	.09	.31
Status	-11.32	8.34	-1.05
Model 3			
Gender	5.87	5.49	.52
Age	-2.59*	1.06	-1.06*
Mainstream Coping	.04	.08	.15
Obj. Acc. Stress	-.32	.21	-1.13
Status	-14.59^	7.17	-1.35^
Status X Acc. Stress	.34^	.16	1.65^

Note. $R^2 = .30$, $p = .30$ for Model 1, $R^2 = .45$, $p = .37$ for Model 2, $R^2 = .66$, $p = .08$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Hypothesis 2. Hypothesis 2 predicted that universal coping strategies would moderate the relationship between objective acculturative stress and outcome. A series of

regression analyses were performed to investigate these hypotheses. Specifically, hypothesis 2a and 2b predicted that at high levels of active coping (2a) and support seeking coping (2b), as stress increases, internalizing symptoms and externalizing symptoms would decrease. Hypothesis 2c predicted that at high levels of avoidant coping, as stress increases, internalizing symptoms and externalizing symptoms would increase. First, age, status, and gender in step 1 were entered as predictors to control for their potential effects on outcomes. The centered acculturative stress variable and centered coping variables were entered in step 2 of the model. Interaction terms were created with the centered coping variables and centered acculturative stress variable, and these interaction variables were then entered into the final step of the regression. A total of 2 regression analyses, one for each of the 2 outcome variables (internalizing and externalizing symptoms) were conducted for each mainstream coping strategy.

Analyses revealed no significant main effects or interactions for hypotheses 2a and 2c. Results for Hypothesis 2b showed significance at the trend level for an interaction between support seeking coping and objective acculturative stressors predicting internalizing symptoms, β = -.40, p = .08. Simple slopes analysis revealed that high levels of support seeking coping moderated the relationship between symptoms and acculturative stress (β = 1.11, p = .01) in the same direction as predicted. There was no effect present at low levels (β = .39, p = .14). Results are depicted in Figure 1. A significant main effect of objective acculturative stress (β = .78, p = .02) and a significant interaction between support seeking coping and stress predicting externalizing symptoms were also identified, β = -.67, p = .02. Follow up analyses using simple slopes showed

that at high levels of support seeking coping, as stress level increased, externalizing symptoms increased, $\beta = 1.37$, $p = .01$; results are depicted in Figure 2. No effect was found at low levels of support seeking coping. (Results for objective acculturative stress Hypothesis 2 are presented in Tables 9-14).

Table 9. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Active Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-2.33	1.38	-.68
Gender	16.30*	6.67	1.02*
Status	-23.58*	8.54	-1.55*
Obj. Acc. Stress	.25	.10	.64
Active Coping	-.15	.15	-.27
Model 3			
Age	-2.32	1.41	-.68
Gender	17.91*	7.10	1.13*
Status	-23.55*	8.72	-1.55*
Obj. Acc. Stress	.71	.58	1.81
Active Coping	-.21	.17	-.38

Active X Acc.	-.01	.01	-1.14
Stress			

Note. $R^2 = .32$, $p = .26$ for Model 1, $R^2 = .63$, $p = .09$ for Model 2, $R^2 = .66$, $p = .44$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 10. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Active Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.43	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-1.06	1.77	-.31
Gender	11.15	8.54	.70
Status	-13.57	10.93	-.89
Obj. Acc. Stress	.24^	.13	.60^
Active Coping	-.15	.20	-.27
Model 3			
Age	-1.05	1.68	-.30
Gender	14.40	8.44	.90
Status	-13.51	10.37	-.88
Obj. Acc. Stress	1.16	.68	2.95
Active Coping	-.27	.21	-.48
Active X Acc.	-.02	.01	-2.30

Stress			

Note. $R^2 = .12$, $p = .73$ for Model 1, $R^2 = .40$, $p = .22$ for Model 2, $R^2 = .66$, $p = .21$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 11. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Support Seeking Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79	9.15	-1.10
Model 2			
Age	-2.95	1.43	-.86^
Gender	15.68	5.81	1.00
Status	-27.62	9.46	-1.81*
Obj. Acc. Stress	.25*	.10	.63*
Support Seeking	-.51	.39	-.38
Model 3			
Age	-2.42^	1.23	-.71^
Gender	14.27*	4.93	.90*
Status	-24.72*	8.08	-1.62*
Obj. Acc. Stress	.30*	.08	.75*
Support Seeking	-.46	.32	-.34
SS X Acc. Stress	-.02^	.01	-.40^

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .66$, $p = .06$ for Model 2, $R^2 = .79$, $p = .08$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 12. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Support Seeking Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-1.05	1.98	-.31
Gender	7.72	8.02	.48
Status	-10.58	13.06	-.69
Obj. Acc. Stress	.22	.13	.57
Support Seeking	-.05	.54	-.04
Model 3			
Age	-.18	1.45	-.05
Gender	5.38	5.80	.34
Status	-5.76	9.49	-.38
Obj. Acc. Stress	.31*	.10	.78*
Support Seeking	.03	.39	.02
SS X Acc. Stress	-.04*	.01	-.67*

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .36$ $p = .29$ for Model 2, $R^2 = .71$, $p = .02$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 13. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Avoidant Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-2.23	1.47	-.65
Gender	12.70	7.52	.80
Status	-19.88^	8.81	-1.31^
Obj. Acc. Stress	.24^	.11	.60^
Avoidant Coping	-.02	.47	-.01
Model 3			
Age	-2.44	1.51	-.71
Gender	14.25	7.88	.90
Status	-20.75^	9.03	-1.36^
Obj. Acc. Stress	.30^	.13	.75^
Avoidant Coping	-.12	.49	-.08
Avoid. X Acc. Stress	-.03	.03	-.24

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .58$, $p = .14$ for Model 2, $R^2 = .62$, $p = .42$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 14. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Avoidant Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-.95	1.68	-.28
Gender	14.10	8.64	.88
Status	-14.65	10.11	-.96
Obj. Acc. Stress	.24^	.12	.61^
Avoidant Coping	-.66	.53	-.43
Model 3			
Age	-1.07	1.80	-.31
Gender	15.05	9.36	.94
Status	-15.19	10.73	-.99
Obj. Acc. Stress	.28	.15	.71
Avoidant Coping	-.72	.58	-.47
Avoid. X Acc. Stress	-.02	.04	-.15

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .46$ $p = .14$ for Model 2, $R^2 = .02$, $p = .67$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Figure 1. Support-Seeking Coping Moderating Associations between Objective Stress and Internalizing Symptoms.

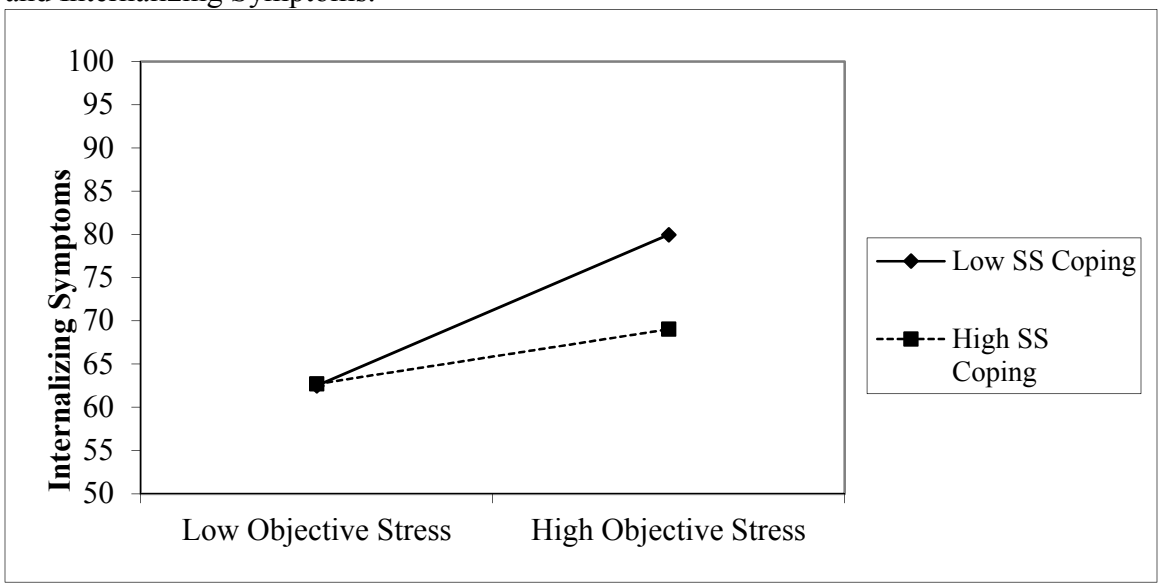
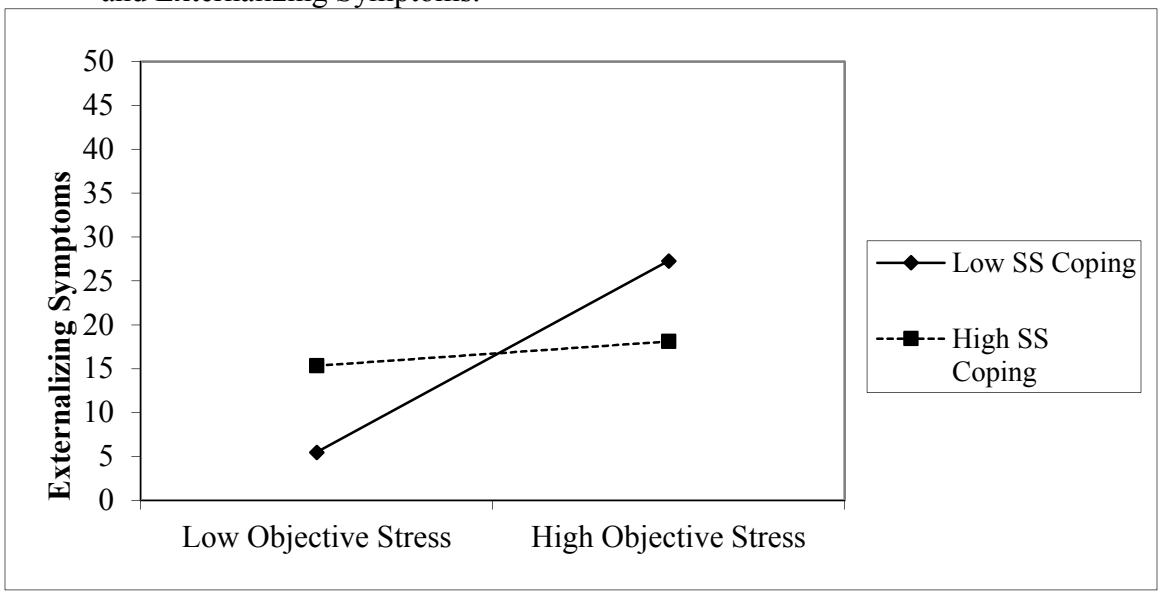


Figure 2. Support-Seeking Coping Moderating Associations between Objective Stress and Externalizing Symptoms.



Hypothesis 3. Hypothesis 3 predicted that culturally-relevant coping strategy, communalistic coping, would moderate the relationship between stress and outcomes. It was expected that as stress levels increase, internalizing and externalizing symptoms

would decrease at high levels of communalistic coping. Age, status, and gender were entered in step 1, controlling for their effects of outcomes. Next, the centered objective acculturative stress variable and centered communalistic coping variable was entered into step 2. An interaction term between stress and communalistic coping was created and entered into the final step of the regression model. These analyses revealed no significant interactions (results presented in Table 15-16).

Table 15. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Communalistic Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-2.04	1.40	-.60
Gender	18.95*	8.46	1.19*
Status	-25.44*	9.52	-1.67*
Obj. Acc. Stress	.32*	.13	.81*
Communalistic	-.65	.65	-.44
Model 3			
Age	-2.64	1.38	-.77
Gender	21.31*	8.13	1.34*
Status	-27.94*	9.12	-1.84*

Obj. Acc. Stress	.56*	.21	1.44*
Communalistic	-.68	.61	-.46
Comm. X Acc. Stress	-.05	.03	-.63

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .63$ $p = .09$ for Model 2, $R^2 = .71$, $p = .20$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 16. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Communalistic Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-.83	1.81	-.24
Gender	12.28	11.00	.77
Status	-14.08	12.37	-.92
Obj. Acc. Stress	.29	.17	.72
Communalistic	-.50	.84	-.33
Model 3			
Age	-1.35	1.93	-.39
Gender	14.36	11.36	.90
Status	-16.30	12.76	-1.06
Obj. Acc. Stress	.50	.29	1.28

Communalistic	-.52	.85	-.35
Comm. X Acc. Stress	-.04	.04	-.55

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .38$ $p = .24$ for Model 2, $R^2 = .45$, $p = .40$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Research question 2. To investigate research question 2, a series of multiple regression analyses were performed to examine whether the remaining culturally-relevant coping strategies (maintaining harmony, emotional debriefing, and spiritually centered coping) moderate the stress-outcomes relationship. First, age, status, and gender in step 1 were entered as predictors to control for their potential effects on outcomes. The centered objective stress variable and centered coping variables were entered in step 2. Interaction terms were created with the centered coping variables and centered acculturative stress variable, and these interaction variables were then entered into the final step of the regression. A total of 2 regression analyses, one for each of the 2 outcome variables (internalizing and externalizing symptoms) were conducted.

Analyses revealed no significant interactions for emotional debriefing and spiritually centered coping as moderators. However, there was a trending interaction between stress and maintaining harmony coping ($\beta = .56$, $p = .06$) with internalizing symptoms as an outcome. Posthoc analyses using simple slopes revealed a significant, negative relationship between objective acculturative stress and internalizing symptoms at low levels of maintaining harmony coping ($\beta = .89$, $p = .02$), see Figure 3. However, the relationship was not significant at high levels of coping use. Analyses revealed a significant interaction between objective stress and maintaining harmony related to externalizing symptoms ($\beta = .84$, $p = .04$), see Figure 4. At low levels of maintaining

harmony coping, as stress level increased, externalizing symptoms decreased (β = 1.14, p = .02); this effect was not seen at high levels of maintaining harmony coping (β = -1.26, p = .14). Tables 17-22 present the results of these analyses.

Table 17. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Emotional Debriefing Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-2.45	1.47	-.71
Gender	14.38*	6.47	.91*
Status	-22.90*	9.44	-1.50*
Obj. Acc. Stress	.24*	.10	.62*
Emotional Debriefing	-.33	.54	-.18
Model 3			
Age	-2.64	1.50	-.77
Gender	16.07*	6.78	1.01*
Status	-25.53*	9.94	-1.68*
Obj. Acc. Stress	.32*	.13	.82*
Emotional Debriefing	-.59	.61	-.31
Emo. Deb. X Acc.	-.03	.03	-.30

Stress			

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .60$ $p = .12$ for Model 2, $R^2 = .65$, $p = .39$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$, $^{\wedge}.05 < p < .09$.

Table 18. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Emotional Debriefing Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-1.45	1.75	-.42
Gender	11.60	7.67	.73
Status	-16.82	11.19	-1.10
Obj. Acc. Stress	.24^	.12	.61^
Emotional Debriefing	-.74	.64	-.39
Model 3			
Age	-1.51	1.88	-.44
Gender	12.19	8.48	.76
Status	-17.73	12.42	-1.16
Obj. Acc. Stress	.27	.17	.68
Emotional Debriefing	-.82	.76	-.43
Emo. Deb. X Acc. Stress	-.01	.04	-.10

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .45$ $p = .16$ for Model 2, $R^2 = .45$, $p = .80$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 19. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Spiritually Centered Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-2.21	1.49	-.65
Gender	11.45	12.36	.72
Status	-18.64	13.97	-1.22
Obj. Acc. Stress	.24^	.10	.05
Spiritually Centered	-.12	1.22	-.18
Model 3			
Age	-1.99	1.57	-.58
Gender	7.55	14.04	.48
Status	-13.73	16.19	-.90
Obj. Acc. Stress	.17	.14	.44
Spiritually Centered	.65	1.49	.28
Spiritual X Acc. Stress	.06	.08	.25

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .58$ $p = .14$ for Model 2, $R^2 = .61$, $p = .52$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 20. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Spiritually Centered Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-.64	1.71	-.19
Gender	-7.68	14.24	-.48
Status	5.99	16.09	.39
Obj. Acc. Stress	.22	.12	.56
Spiritually Centered	1.68	.1.40	.73
Model 3			
Age	-.54	1.86	-.16
Gender	-9.36	16.63	-.59
Status	8.10	19.17	.53
Obj. Acc. Stress	.19	.17	.49
Spiritually Centered	1.91	1.76	.83
Spiritual X Acc. Stress	.02	.10	.11

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .45$ $p = .15$ for Model 2, $R^2 = .45$, $p = .81$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$, $^{\wedge}.05 < p < .09$.

Table 21. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Maintaining Harmony Coping on Internalizing Symptoms

	B	SE B	β
Model 1			
Age	-1.05	1.57	-.31
Gender	9.46	6.50	.60
Status	-16.79^	9.15	-1.10^
Model 2			
Age	-1.02	1.49	-.30
Gender	9.64	5.41	.61
Status	-11.45	8.81	-.75
Obj. Acc. Stress	.18	.10	.45
Maintaining Harmony	.58	.37	.42
Model 3			
Age	-1.22	1.23	-.36
Gender	3.69	5.20	.23
Status	-11.60	7.24	-.76
Obj. Acc. Stress	.03	.11	.08
Maintaining Harmony	.70^	.31	.50^
Main. Harm X Acc. Stress	.06^	.03	.56^

Note. $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .68$ $p = .05$ for Model 2, $R^2 = .81$, $p = .06$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 22. Regression Summary Table: Interactions between Objective Acculturative Stress Level and Maintaining Harmony Coping on Externalizing Symptoms

	B	SE B	β
Model 1			
Age	.15	1.79	.04
Gender	4.52	7.42	.28
Status	-6.98	10.45	-.46
Model 2			
Age	-.40	2.11	-.12
Gender	-6.04	7.61	.38
Status	-5.85	12.40	-.38
Obj. Acc. Stress	.20	.14	.50
Maintaining Harmony	.28	.52	.20
Model 3			
Age	-.69	1.65	-.20
Gender	-2.88	6.97	-.18
Status	-6.07	9.70	-.40
Obj. Acc. Stress	-.02	.14	-.06
Maintaining Harmony	.45	.42	.32
Main. Harm X Acc. Stress	.08*	.03	.84*

Note. $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .38$ $p = .25$ for Model 2, $R^2 = .67$, $p = .04$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Figure 3. Maintaining Harmony Coping Moderating Associations between Objective Stress and Internalizing Symptoms.

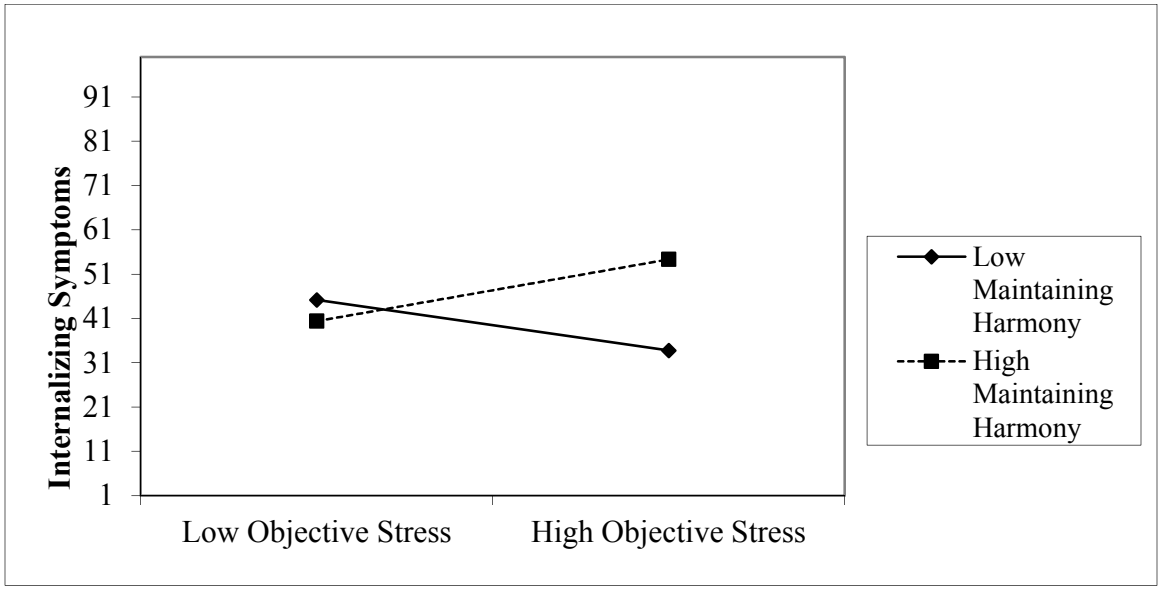
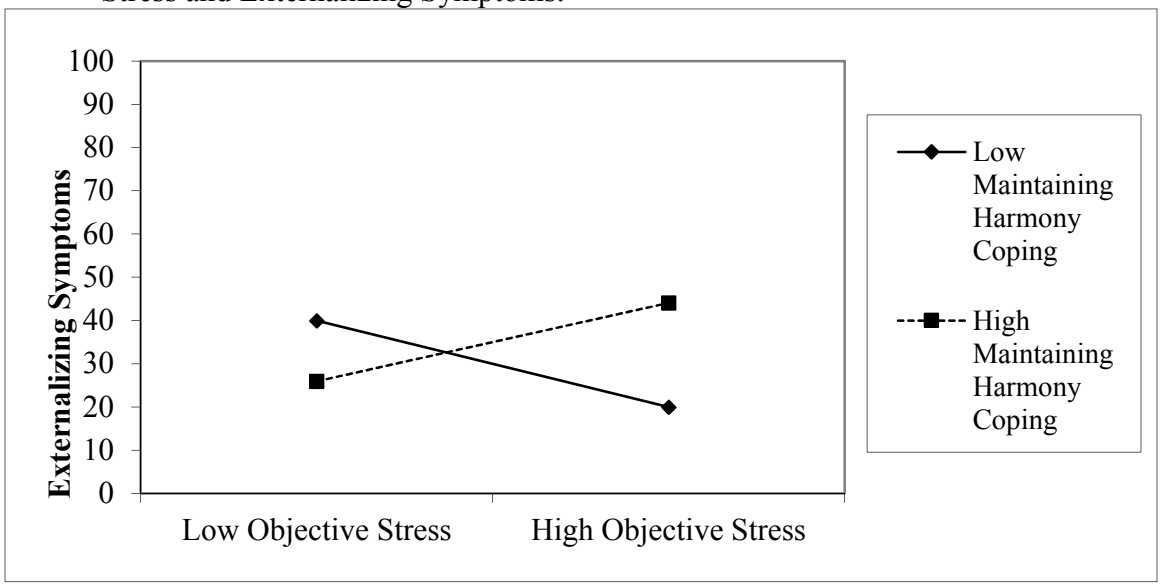


Figure 4. Maintaining Harmony Coping Moderating Associations between Objective Stress and Externalizing Symptoms.



Results Using Perceived Stress as a Predictor

Hypothesis 1. Hypothesis 1 predicted that acculturative stress would be related to internalizing and externalizing symptoms such that as stress increases, outcomes also

increase. To determine this relationship, two simultaneous multiple regressions were performed using internalizing and externalizing symptoms as outcomes. In step 1, age and gender were entered as predictors to control for their potential effects on outcomes. Acculturative stress and status (immigrant vs. refugee) was then entered in step 2. Inconsistent with Hypothesis 1, analysis revealed no significant relationship between acculturative stress levels and externalizing symptoms (β = -.06, p = .14), but did for internalizing symptoms (β = .01, p = .02). See Table 23 for results.

Table 23. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Status on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Gender	1.30	5.22	.08	1.13	5.28	.07
Age	1.13	1.13	.33	1.06	1.14	.31
Model 2						
Gender	7.76	7.35	.49	1.92	8.27	.12
Age	-1.00	1.63	-.29	.23	1.83	.07
Perceived Acc. Stress	.08	.14	.19	.13	.16	.28
Status	-14.24	10.46	-.94	-3.07	11.77	.20
Model 3						
Gender	4.55	8.54	.29	-4.25	8.87	-.27
Age	-1.34	1.72	-.39	-.44	1.78	-.13

Perceived Acc. Stress	.00*	.18	.01*	-.03	.18	-.06
Status	-12.46	10.92	-.82	.35*	11.34	.02*
Status X Acc. Stress	.26	33	.37	.50	.34	.70

Note. Internalizing symptoms $R^2 = .09$, $p = .60$ for Model 1, $R^2 = .34$, $p = .23$ for Model 2, $R^2 = .39$, $p = .45$ for Model 3. Externalizing symptoms $R^2 = .08$, $p = .64$ for Model 1, $R^2 = .17$, $p = .61$ for Model 2, $R^2 = .38$, $p = .18$ for Model 3.
**$p < .01$, *$p < .05$.

Research question 1. To test this research question, which examines whether acculturative stress predicts the use of culturally-relevant coping controlling for mainstream coping strategies and if status moderates those relationships, multiple regression analysis was performed with acculturative stress and status predicting each of the four culturally-relevant coping strategies as outcomes. In step 1, age and gender were entered as predictors to control for their potential effects on outcomes. A total score for mainstream coping strategies (i.e., active, avoidant, support-seeking, and distraction) was computed and entered in step 2 as a predictor to control for the effects of mainstream coping. Acculturative stress and status were entered in step 3 to examine main effects. Finally, an interaction term between acculturative stress and status was entered in step 3. A total of 4 regression analyses were conducted, one for each culturally-relevant coping strategy as an outcome.

Consistent with predictions, analyses revealed a significant main effect for acculturative stress level ($\beta = -.53$, $p = .05$) and no effect for status ($\beta = -.53$, $p = .049$) in predicting emotional debriefing. This effect was lost in the fourth step of the model; the interaction between acculturative stress level and status was not significant ($\beta = -.48$, $p = .56$). Analyses found significant a main effect of status ($\beta = -1.22$, $p = .006$) predicting

use of spiritually-centered coping and a significant interaction between status and acculturative stress level ($\beta = 1.02$, $p = .03$). However, post-hoc analyses were not significant. Results for spiritually-centered coping are presented in Table 26.There were no significant main effects for acculturative stress and status and no significant interactions in predicting communalistic coping and maintaining harmony coping. These results are presented in Tables 24-25, and 27.

Table 24. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Status on Communalistic Coping

	B	SE B	β
Model 1			
Gender	2.46	1.75	.23
Age	.98*	.42	.42*
Mainstream Coping	.15*	.04	.66*
Model 2			
Gender	2.58	3.59	.24
Age	1.02	.61	.44
Mainstream Coping	.15*	.05	.66*
Per. Acc. Stress	-.02	.06	-.06
Status	-.06	4.92	-.01
Model 3			
Gender	2.01	3.97	.19
Age	.94	.67	.41
Mainstream Coping	.15*	.05	.61*

Per. Acc. Stress	-.10	.18	-.32
Status	.13	5.20	.01
Status X Acc. Stress	.06	.13	.30

Note. $R^2 = .82$, $p = .001$ for Model 1, $R^2 = .82$, $p = .94$ for Model 2, $R^2 = .67$, $p = .66$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 25. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Status on Emotional Debriefing Coping

	B	SE B	β
Model 1			
Gender	-1.14	2.24	-.14
Age	-.09	.53	-.05
Mainstream Coping	.13	.05	.73
Model 2			
Gender	4.77	3.47	.57
Age	-.54	.59	-.30
Mainstream Coping	.08	.05	.44
Per. Acc. Stress	-.12*	.05	-.53
Status	-9.09*	4.76	-1.13*
Model 3			
Gender	5.48	3.80	.65
Age	-.44	.64	-.24
Mainstream Coping	.08	.05	.47
Per. Acc. Stress	-.02	.17	-.10

Status	-9.32	4.97	-1.16
Status X Acc. Stress	-.08	.12	-.48

Note. $R^2 = .51$, $p = .06$ for Model 1, $R^2 = .72$, $p = .10$ for Model 2, $R^2 = .74$, $p = .56$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 26. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Status on Spiritually Centered Coping

	B	SE B	β
Model 1			
Gender	3.66	1.84	.53
Age	.75	.44	.50
Mainstream Coping	.05	.04	.31
Model 2			
Gender	8.18*	1.91	1.18*
Age	-.16*	.33	-.11*
Mainstream Coping	-.01	.03	-.06
Per. Acc. Stress	.05^	.03	.28^
Status	-8.12*	2.61	-1.22*
Model 3			
Gender	6.93*	1.49	1.00*
Age	-.34	.25	-.23
Mainstream Coping	-.02	.02	-.12
Per. Acc. Stress	-.12	.07	-.62
Status	-7.71*	1.95	-1.16*
Status X Acc. Stress	.13*	.05	1.02*

Note. $R^2 = .52$, $p = .05$ for Model 1, $R^2 = .80$, $p = .004$ for Model 2, $R^2 = .94$, $p = .03$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$.

Table 27. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Status on Maintaining Harmony Coping

	B	SE B	β
Model 1			
Gender	-4.79	3.61	-.42
Age	-.70	.86	-.29
Mainstream Coping	.14	.08	.56
Model 2			
Gender	-2.86	6.47	-.49
Age	-1.43	1.10	-.59
Mainstream Coping	.10	.09	.42
Per. Acc. Stress	.12	.10	.37
Status	-4.19	8.87	-.39
Model 3			
Gender	-5.59	6.44	-.49
Age	-1.83	1.08	.75
Mainstream Coping	.08	.09	.34
Per. Acc. Stress	-.27	.29	-.85
Status	-3.29	8.43	-.30
Status X Acc. Stress	.29	.21	1.38

Note. $R^2 = .30$, $p = .30$ for Model 1, $R^2 = .47$, $p = .32$ for Model 2, $R^2 = .23$, $p = .21$ for Model 3.
$^{**}p < .01$, $^{*}p < .05$, $^{\wedge}.05 < p < .09$.

Hypothesis 2. Hypothesis 2 predicted that universal coping strategies would moderate the relationship between acculturative stress and outcomes. A series of regression analyses were performed to investigate these hypotheses. Specifically, hypothesis 2a and 2b predicted that at high levels of active coping (2a) and support seeking coping (2b), as stress increases, internalizing symptoms and externalizing symptoms would decrease. Hypothesis 2c predicted that at high levels of avoidant coping, as stress increases, internalizing symptoms and externalizing symptoms would increase. First, age, status, and gender were entered in step 1 as predictors to control for their potential effects on outcomes. The centered acculturative stress variable and centered coping variables were entered in step 2 of the model. Interaction terms were created with the centered coping variables and centered acculturative stress variable, and these interaction variables were then entered into the final step of the regression. A total of two regression analyses, one for each of the two outcome variables (internalizing and externalizing symptoms) were conducted for each mainstream coping strategy. Analyses revealed no significant main effects or interaction effects for hypotheses 2a, 2b, and 2c. Results are presented in Tables 28-30.

Table 28. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Active Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.43	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	-1.01	1.70	-.30	.22	1.92	.06
Gender	10.11	9.10	.64	4.20	10.28	.26
Status	-16.66	12.04	-1.09	-5.43	13.61	-.36
Per. Acc. Stress	.08	.15	.18	.12	.17	.28
Active Coping	-.10	.20	-.17	-.09	.23	-.17
Model 3						
Age	-1.49	1.79	-.43	-.19	2.08	-.05
Gender	15.53	10.91	.98	8.79	12.65	.55
Status	-25.62	15.55	-1.68	-13.02	18.04	-.85
Per. Acc. Stress	-.66	.81	-1.48	-.50	.94	-1.13
Active Coping	-.05	.21	-.09	-.05	.24	-.09
Active X Acc. Stress	.02	.02	1.52	.02	.02	1.29

Note. Internalizing Symptoms $R^2 = .32$, $p = .26$ for Model 1, $R^2 = .36$, $p = .77$ for Model 2, $R^2 = .43$, $p = .37$ for Model 3.
Externalizing Symptoms $R^2 = .12$, $p = .73$ for Model 1, $R^2 = .19$, $p = .71$ for Model 2, $R^2 = .24$, $p = .52$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 29. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Support Seeking Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79	9.15	-1.10	-6.98	10.45	-.46
Model 2						
Age	-1.52	1.79	-.44	.30	2.09	.09
Gender	10.33	8.17	.65	1.60	9.55	.10
Status	-20.62	13.38	-1.35	-2.27	15.64	-.15
Per. Acc. Stress	.08	.15	.17	.13	.17	.29
Support Seeking	-.41	.52	-.30	.05	.61	.04
Model 3						
Age	-1.50	1.90	-.44	.38	2.08	-.05
Gender	8.04	11.73	.51	-7.50	12.81	-.47
Status	-17.65	17.54	-1.16	9.58	19.15	.63
Per. Acc. Stress	.08	.16	.18	.13	.17	.30
Support Seeking	-.29	.70	-.21	.55	.76	.40
SS X Acc. Stress	-.02	.05	-.13	-.06	.06	-.53

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .39$, $p = .64$ for Model 2, $R^2 = .40$, $p = .78$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .18$, $p = .77$ for Model 2, $R^2 = .29$, $p = .33$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 30. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Avoidant Coping on Internalizing and Externalizing Symptoms

	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	-1.02	1.72	-.30	.30	1.88	.09
Gender	5.98	10.00	.38	6.84	10.97	.43
Status	-12.84	12.10	-.84	-6.95	13.28	-.45
Per. Acc. Stress	.09	.15	.20	.11	.17	.24
Avoidant Coping	.17	2.22	-.48	-.46	.64	-.30
Model 3						
Age	-1.63	2.22	-.48	.08	2.47	.02
Gender	10.19	13.77	.64	8.35	15.32	.52
Status	-19.22	18.54	-1.26	-9.23	20.63	-.60
Per. Acc. Stress	.09	.16	.20	.11	.18	.24
Avoidant Coping	.25	.64	.16	-.43	.71	-.28
Avoid. X Acc. Stress	.02	.05	.27	.01	.05	.09

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .35$, $p = .83$ for Model 2, $R^2 = .37$, $p = .65$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .22$, $p = .60$ for Model 2, $R^2 = .23$, $p = .88$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Hypothesis 3. Hypothesis 3 predicted that culturally-relevant coping strategy, communalistic coping, would moderate the relationship between acculturative stress and outcomes. Specifically, hypothesis 3 predicted that at high levels of communalistic coping, as stress increases, internalizing symptoms and externalizing symptoms would decrease. A series of regression analyses were performed to investigate these hypotheses. First, age, status, and gender were entered in step 1 as predictors to control for their potential effects on outcomes. The centered acculturative stress variable and centered coping variable were entered in step 2 of the model. An interaction terms was created with the centered coping variable and centered acculturative stress variable, and this interaction variable was then entered into the final step of the regression. Regression analyses revealed no significant main effects or interactions. See Table 31 for results.

Table 31. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Communalistic Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	-1.43	1.77	-.42	-.30	1.98	-.09
Gender	3.13	9.81	.20	-3.73	10.98	-.23

Status	-9.86	12.27	-.65	2.27	13.73	.15
Per. Acc. Stress	.11	.15	.25	.16	.17	.36
Communalistic	.49	.67	.33	.60	.75	.40
Model 3						
Age	-1.80	1.84	-.53	-.61	2.11	-.18
Gender	20.15	21.66	1.27	10.73	24.81	.67
Status	-31.00	26.94	-2.04	-15.69	30.85	-1.03
Per. Acc. Stress	.15	.16	.33	.19	.18	.43
Communalistic	-.49	1.30	-.33	-.23	1.49	-.16
Comm. X Acc. Stress	.05	.06	.69	.04	.07	.59

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .39$ $p = .67$ for Model 2, $R^2 = .45$, $p = .41$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .24$ $p = .56$ for Model 2, $R^2 = .28$, $p = .53$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Research question 2. A series of multiple regressions were performed to examine research question 2 that investigates whether the remaining culturally-relevant coping strategies (maintaining harmony, emotional debriefing, and spiritually centered coping) moderate the relationship between acculturative stress and outcomes. First, age, status, and gender were entered in step 1 as predictors to control for their potential effects on outcomes. The centered acculturative stress variable and centered coping variables were entered in step 2 of the model. Interaction terms were created with the centered coping variables and centered acculturative stress variable, and these interaction variables were then entered into the final step of the regression. A total of 2 regression analyses, one for each of the 2 outcome variables (internalizing and externalizing symptoms) were

conducted. Analyses revealed no significant main effects or interactions for acculturative stress, culturally relevant coping strategies and internalizing or externalizing symptoms. Results are presented in Tables 32-34.

Table 32. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Emotional Debriefing Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	-.93	1.81	-.27	.00	2.02	.00
Gender	6.86	10.82	.43	5.02	12.08	.32
Status	-12.75	16.58	-.84	-8.17	18.52	-.53
Per. Acc. Stress	.10	.20	.22	.07	.22	.16
Emotional Debriefing	.11	.90	.06	-.37	1.00	-.20
Model 3						
Age	-1.90	2.11	-.56	-1.03	2.37	-.30
Gender	12.59	12.57	.79	11.09	14.13	.70
Status	-20.59	18.78	-1.35	-16.47	21.11	-1.08
Per. Acc. Stress	.13	.20	.30	.11	.23	-.15

Emotional Debriefing	.19	.91	.10	-.29	1.02	-.15
Emo. Deb. X Acc. Stress	.04	.04	.41	.04	.04	.43

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .34$ $p = .86$ for Model 2, $R^2 = .42$, $p = .39$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .19$ $p = .72$ for Model 2, $R^2 = .27$, $p = .42$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 33. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Spiritually Centered Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	-1.06	1.74	-.31	.46	1.90	.13
Gender	11.08	16.38	.70	-9.89	17.88	-.62
Status	-17.48	17.90	-1.15	8.45	19.53	.55
Per. Acc. Stress	.11	.18	.24	.04	.20	.10
Spiritually Centered	-.43	1.86	-.19	1.53	2.03	.67
Model 3						
Age	-.99	1.66	-.29	.52	1.89	.15
Gender	5.83	16.09	.37	-14.58	18.31	-.91

Status	-10.57	17.81	-.69	14.61	20.26	.96
Per. Acc. Stress	.24	.20	.54	.16	.23	.35
Spiritually Centered	-1.52	1.95	-.67	.55	2.22	.24
Spiritual X Acc. Stress	-.08	.06	-.70	-.07	.07	-.62

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .35$ $p = .84$ for Model 2, $R^2 = .48$, $p = .22$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .23$ $p = .59$ for Model 2, $R^2 = .33$, $p = .33$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

Table 34. Regression Summary Table: Interactions between Perceived Acculturative Stress Level and Maintaining Harmony Coping on Internalizing and Externalizing Symptoms

	Internalizing Symptoms			Externalizing Symptoms		
	B	SE B	β	B	SE B	β
Model 1						
Age	-1.05	1.57	-.31	.15	1.79	.04
Gender	9.46	6.50	.60	4.52	7.42	.28
Status	-16.79^	9.15	-1.10^	-6.98	10.45	-.46
Model 2						
Age	.26	1.56	.08	.95	2.04	.28
Gender	6.32	6.46	.40	1.10	8.46	.07
Status	-5.86	10.11	-.38	1.73	13.22	.11
Per. Acc. Stress	.01	.13	.02	.08	.17	.19
Maintaining Harmony	.83	.43	.59	.47	.56	.34
Model 3						

Age	.35	1.69	.10	.78	2.20	.23
Gender	7.00	7.32	.44	-.25	9.51	-.02
Status	-6.28	10.86	-.41	2.57	14.11	.17
Per. Acc. Stress	-.01	.15	-.02	.11	.20	.26
Maintaining Harmony	.86	.47	.61	.40	.61	.29
Main. Harm X Acc. Stress	.01	.03	.08	-.01	.03	-.16

Note. Internalizing Symptoms $R^2 = .32$ $p = .26$ for Model 1, $R^2 = .55$ $p = .18$ for Model 2, $R^2 = .56$, $p = .79$ for Model 3.
Externalizing Symptoms $R^2 = .12$ $p = .73$ for Model 1, $R^2 = .24$ $p = .54$ for Model 2, $R^2 = .26$, $p = .69$ for Model 3.
**$p < .01$, *$p < .05$, ^$.05 < p < .09$.

CHAPTER FIVE

DISCUSSION

For immigrant and refugee youth, acculturative stress negatively affects mental health functioning. The purpose of the current study was to examine this association within a sample of African youth, and to investigate the role of mainstream (active, avoidant, support-seeking, and distraction) and culturally-relevant (emotional debriefing, maintaining harmony, spiritual-centered, and communalistic) coping strategies as a moderator of the association between acculturative stress and outcomes. Overall, the current study found differences between objective and perceived acculturative stress as predictors.

Inconsistent with Hypothesis 1, objective acculturative stress was not significantly related to either internalizing or externalizing symptoms. Perceived stress was significantly related to internalizing symptoms, but not externalizing symptoms. For research question 1, the current study examined whether acculturative stress levels and immigration status were related to culturally-relevant coping use controlling for mainstream coping. Analyses for research question 1 revealed that higher objective acculturative stress levels predicted more use of communalistic coping, but no other culturally-relevant coping strategies. Additionally, perceived acculturative stress was not associated with any culturally-relevant coping strategies. Also, for research question 1,

immigration status predicted the use of spiritually-centered coping. Immigration status also moderated the relationship between objective acculturative stress and maintaining harmony coping such that for immigrants, higher stress levels were related to more coping use. Immigration status did not interact with perceived acculturative stress to predict coping.

The current study also examined the effects of mainstream coping as a moderator between acculturative stress (objective and perceived) and outcomes. Inconsistent with hypothesis 2a, active coping did not moderate the relationship between stress (objective and perceived) and outcomes. The results showed partial support for hypothesis 2b with support seeking coping interacting with objective stress at the trend level in the prediction of both internalizing symptoms and externalizing symptoms. Specifically, objective acculturative stress predicted fewer internalizing symptoms when support seeking coping was high, but more externalizing symptoms when support seeking coping was high. Contrary to hypothesis 2b, perceived stress did not interact with support seeking coping to predict outcomes. Also, contrary to predictions for hypothesis 2c, avoidant coping did not significantly affect the association between either acculturative stress type or outcomes.

The current study also sought to examine interactions between culturally-relevant coping strategies between acculturative stress. Inconsistent with hypothesis 3, communalistic coping did not interact with objective or perceived stress in the prediction of outcomes. Results for research question 2 showed that maintaining harmony coping had a trending interaction with objective stress. Posthoc probes, however, were

inconsistent with predictions. The relationship was insignificant at when coping use levels were high, and when it was low, internalizing and externalizing symptoms decreased as objective stress levels increased. There was no significant interaction with perceived stress. Neither emotional debriefing nor spiritually-centered coping interacted with objective or perceived acculturative stress in the prediction of outcomes.

Differences between Objective and Perceived Acculturative Stress

The current study included two different measures of acculturative stress—objective acculturative stress and perceived acculturative stress. Objective stress measured the frequency of acculturation-related events, and perceived stress captured the extent to which the event was deemed as stressful. Inconsistent with all hypotheses, perceived stress was not related to internalizing or externalizing symptoms nor did it interact with coping strategies to predict outcomes. Conversely, a number of trending and significant findings were identified with objective acculturative stress as a predictor. The discrepancy in results between the two measures of stress, in particular the lack of findings for perceived stress, is surprising given the significant findings using perceived acculturative stress in previous research (Romero et al., 2007; Yeh, 2003). Although both Romero et al.'s and Yeh's studies examined perceived stress among adolescents from various ethnic groups, neither study included African-descended individuals, whose experience with acculturative stress may differ from that of Asians and Latinos (Beru, 2010). Furthermore Romero et al.'s investigated the effects of socioeconomic status and language preference when examining the relationship between perceived stress and outcomes. Their results showed that both factors, especially SES, contributed to

increased perceived stress. The sample within the current study may not be diverse in SES, which could have affected the levels of perceived stress.

The utility of objective versus perceived stress in general has been discussed frequently in the stress and coping literature. While perceived stress is useful for understanding how people appraise a situation and interact with their environment, this kind of measure is subject to bias as people may minimize or intensify their responses. It is possible that participants in the current study underreported the perceived stressfulness of the objective acculturative stressors. On the other hand, measurement of objective stressors helps to reduce subjective bias while accounting for the environmental context (Lazurus, 1990; Cohen, Kamarck, & Mermelstein, 1983; Jose & Ratcliffe, 2004). Increased frequency of objective stressors is associated with increased risk for medical illnesses, psychopathology, and impaired psychosocial functioning (Anda, Butchart, Felitti, & Brown, 2010; Schilling, Aseltine, & Gore, 2007; Wen, Hawkley, & Cacioppo, 2006). The relationship between objective acculturative stressors and outcomes highlights the idea that mere exposure to stressful circumstances, regardless of one's appraisal of these events, can influence one's wellbeing.

Objective Stressors, Coping, and Outcomes

Objective acculturative stressors were not significantly related to either internalizing symptoms or externalizing symptoms, inconsistent with some previous findings in the literature on acculturative stress (Oppedal, et al., 2005; Smokowski et al., 2009; Yeh, 2003). However, some research with adolescents has found that at times, particular acculturative stressors such as language and cultural brokering are instead

related to positive outcomes such as cultural learning (Dorner, Orellana, & Jiménez, 2008) and family adaptability (Trickett & Jones, 2007). Such activities may foster interdependence among family members and facilitate cultural and language learning for adolescents. Thus, rather than being associated with more negative outcomes, some of the acculturative stressors assessed in the current study may have provided opportunities for positive growth and development. In addition, a study investigating the longitudinal effects of acculturative stress on depressive symptoms found that stress only affected outcomes indirectly through increased feelings of hopelessness and low ethnic identity (Polanco-Roman & Miranda, 2013). The current study did not investigate ethnic identity or additional sociocultural variables that may influence the acculturative stress-outcomes relationship, which may have affected our findings. It should be noted that although the relationship between objective stressors and outcomes was initially significant, results of the regression analysis showed that the beta weights for objective stressors increased as new variables were introduced into the model. This pattern could be indicative of a statistical suppression effect (Cohen, Cohen, West, & Aiken, 2013), and further studies may explore the presence of suppression with supplemental analyses.

The current study additionally examined the relationship between objective acculturative stressors and culturally-relevant coping strategies. Contrary to predictions, stress levels were not related to the use of communalistic coping after status and the interaction between predictors was accounted for. Status, indicative of one's status as an immigrant or refugee, emerged as a significant predictor and interacted with objective stress to predict use of spiritually-centered and maintaining harmony coping. Refugees

tended to use more spiritually-centered and maintaining harmony coping than immigrants overall, but for immigrants, as acculturative stress levels increased, so too did the use of maintaining harmony coping. These findings suggest that refugees are more likely to use maintaining harmony coping than immigrants, while immigrants are likely to draw on this strategy when they are experiencing high levels of acculturative stress. Although both groups experience objective stressors, for immigrants, this particular kind of coping may have more utility than for refugees. Maintaining harmony is characterized by a commitment to, and appreciation for equality and the natural balance of the world. Immigrants may draw upon this kind of coping when faced with acculturative stressors because of the circumstances of their migration. As they are often voluntary travellers, stressors may be more predictable, and thus immigrants may see creating harmonious living as a necessary only to counterbalance the stressors of their relocation (Berry, Kim, Minde, & Mok, 1987). For this group, the need to use this particular coping strategy might be activated by high levels of stressors. Whereas refugees, who undergo forced displacement, may experience additional stressors outside of acculturation for which they might draw upon maintaining harmony coping. Refugees can experience several shifts in living situation related to their status that may be unpredictable or uncontrollable. These circumstances can be ongoing and can disrupt the balance or harmony in refugees' lives, creating a greater need to regain and maintain harmony as a way of coping.

The current study examined mainstream coping strategies as moderators for the effects of objective acculturative stress on outcomes. The mainstream coping strategy, support-seeking coping, emerged as a moderator of the effects of objective acculturative

stress on outcomes; similar patterns were observed with regard to internalizing and externalizing symptoms (See Figures 1 and 2). Specifically, support-seeking coping demonstrated a protective-reactive effect such that when participants used higher levels of support-seeking coping, internalizing symptoms increased as stress levels increased (Luthar, Cicchetti, & Becker, 2000). This means that support-seeking coping was helpful in minimizing internalizing symptoms only when acculturative stress levels were low, but was not helpful when acculturative stress was high. Similarly, support-seeking coping showed a protective-reactive effect for externalizing symptoms. Specifically, when participants used higher levels of support-seeking coping use, they showed more externalizing symptoms at high levels of stress.

With immigrant adolescents, parental and peer social support has been seen to buffer the effects of stress on internalizing outcomes. Social support measures, however, differ from support-seeking coping strategies. Though social support overall, appears to be a helpful resource for adolescents, using support-seeking behavior as a primary way of coping yields different results under varying circumstances. Previous research has indicated that support-seeking coping may not contribute protective effects when stressors are high because of low quality of social support and its association with rumination. When peers and parents live under the same stressful circumstances, they may not be able to provide high quality or consistent social support for adolescents (Landis et al., 2007). Immigrant and refugee parents likely experience similar acculturative stressors as these adolescents, which may diminish their ability to give their children adequate support. Child and adolescent coping research documents that girls

have a tendency to ruminate more than do boys. When adolescent girls seek social support, they may be receiving it from others who also tend to ruminate and engaging in co-rumination rather than helpful social support (Gaylord-Harden & Cunningham, 2009; Landis et al., 2007).

Inconsistent with the hypotheses, the current study did not find that active and avoidant coping moderated this relationship. Among general life stressors (Ebata & Moos, 1991) and perceived discrimination (Noh & Kaspar, 2003) research, both strategies are related to outcomes. However, some research with acculturative stress found that though avoidant coping is associated with negative outcomes, it may not be directly related to acculturative stress. Rather, use of avoidant coping depended on gender, and for females, more avoidant coping use was related to increased anxiety symptoms (Crockett et al., 2007). Immigrant and refugee youth may be using avoidant strategies to cope with other general stressors, but not necessarily with acculturative stress. For females in particular, these strategies may contribute negatively to mental health, independent of any acculturative stressors. The results for active coping were also inconsistent with previous research examining the effects of coping on the relationship between acculturative stress and internalizing symptoms (e.g., Crockett et al., 2007). For example, one study found that active coping moderated the relationship between acculturative stress and outcomes such that at high levels of coping use, higher acculturative stress was related to less anxiety symptoms and stabilized the amount of depressive symptoms. This could be because these results from the current study are concerning objective stress rather than perceived stress, which is used in much of the

previous literature. The objective stress variable captures how the experience of stressors can affect immigrants' and refugees' mental health, but does not take into account their appraisal of the situations, which is what may trigger an active coping response (Lazarus & Folkman, 1984). A combination variable of objective and perceived stress could better explore the interaction between acculturative stress and coping.

Though the mainstream strategy of support-seeking coping was associated with the stress-outcomes relationship, the culturally-relevant strategy of communalistic coping was not. Although there are some similarities between communalistic coping and support-seeking coping, communalistic coping differs from that of support-seeking in that it is characterized by a connection to the greater community and interdependence with others (i.e. family and friends). For this population, close friends and family members from their communities may remain behind in the country of origin. Additionally family members who are in the host country may be dealing with their own stressors. Literature suggests that peers and adults who are in the same high-stress settings may be unable to provide quality social support (Landis et al., 2007). This may decrease interdependence, thus rendering them a less helpful resource for adolescents to draw upon for coping.

Of the culturally-relevant strategies, maintaining harmony coping emerged as a significant moderator. When maintaining harmony coping use was high, there was no effect of objective stress to either internalizing or externalizing symptoms. At low levels of coping use, symptoms decreased as stress level increased (See Figure 3). This pattern of results is consistent with a protective-stabilizing effect (Luthar, Cicchetti, & Becker,

2000) for maintaining harmony, and suggests that when participants use high levels of maintaining harmony coping, levels of internalizing and externalizing symptoms remain stable, rather than increase, at high levels of stress. These results were contrary to predictions that at high levels of maintaining harmony coping, symptoms would decrease and maintaining harmony would be a helpful strategy. Maintaining harmony coping is characterized both by acceptance and agency responses to the situation. Acceptance maintains harmonious balance by "letting go" of the stressors or the situation (e.g. I just accept that I cannot change what has happened), while agency attempts to actively restore balance in another domain (e.g. I try to make things better by being respectful to other people). Acceptance strategies may be used to mask negative situations, rather than process and come to terms with them. Supplemental analyses at the item level support this assertion, as items representing agency strategies were positively correlated with active coping. Thus, for this sample, using a combination of acceptance and agency strategies might render those endorsing high maintaining harmony use more vulnerable to internalizing and externalizing symptoms than those who use low amounts of the strategy.

Contrary to hypotheses, the remaining two culturally-relevant coping strategies, emotional debriefing and spiritually-centered, did not moderate the objective stress-outcomes relationship. Earlier analyses in the current study for spiritually-centered coping revealed a significant main effect of status and a significant interaction between status and objective acculturative stress level for which the post-hoc analyses were not significant. Objective stress itself, was not related to spiritually-centered coping or

emotional debriefing. The protective effect of spiritually-centered coping may not be evident because the differences in status were not examined with respect to acculturative stress and outcomes.

Limitations and Strengths

A number of limitations must be addressed within the current study. Data collection relied solely on self-report questionnaires, which raises concerns of shared method variance and thus, inflated associations among variables. The variability in associations between the study variables suggests that shared method variance was not an issue in the current study, however, future studies may consider using a multi-method approach and could include reports from parents, teachers, or siblings. Further, given that acculturative stressors exist within the home and school environment, coded observation data may provide insight into the frequency of stressors. The cross-sectional nature of this study is another limitation, which limits the ability to infer a causal relationship between predictors and outcomes. Future research could address the long-term implications of acculturative stress on outcomes and could examine how coping skills develop across adolescence. Another limitation of the current study is the small sample size, which greatly decreases power and reduces our ability to detect associations among variables in the sample. Data collection for the study is ongoing, and additional analyses will be conducted once sufficient power is achieved. Finally, this study examined acculturative stress among African youth, combining nationality, ethnic group, socio-economic status, and immigration status. Although acculturative stress is experienced across all of these group, certain stressors may not be experienced by all groups. For

example, a middle-class immigrant from an English-speaking country may deal with stressors related to accent, but not with language acquisition. Future researchers may compare differences across groups as well as similarities and may also include a measure determining the degree of similarities among home, host, and current community cultures.

While this study had limitations, there were also a number of strengths. Both objective stressors and perceived stress were included in this study, allowing for the comparison between results for the two types of stressors. No other studies reviewed used non-dichotomous stressor frequency scales in conjunction with a perceived stress measure. Inclusion of both types of acculturative stress also allows for us to understand how African adolescents appraise stress and to examine how exposure to stress can related to mental health outcomes, or be influenced by coping strategies. The current study also expanded the literature on coping strategies by examining both mainstream and culturally-relevant strategies. Coping research for adolescents is dominated by mainstream coping strategies and including both kinds of strategies provides better insight as to what helpful or harmful strategies youth draw upon to deal with stress. Culturally-relevant strategies are especially salient given the culturally-tied nature of acculturative stress. As there is a dearth of research on acculturative stress and coping experiences of African people, especially adolescents, the current study contributes necessary knowledge to begin understanding these experiences. This study also included both immigrant and refugee adolescents and examined the influence of status on outcomes. Both groups face acculturative stressors, but the circumstances of their move

to a host country can shape their coping use and subsequent effects on mental health outcomes.

Conclusions

The current study contributes to the literature on acculturative stress and coping with African youth. The results and the number of unconfirmed hypotheses in the current study were likely affected by the small sample size. Despite this, a number of significant findings were observed. Overall, the findings of the current study revealed that African immigrant and refugee youth use several mainstream and culturally-relevant coping strategies when dealing with acculturative stressors. Use of these strategies when dealing with acculturative stressors appear to differ by immigration status, with immigrants and refugees using different levels of some culturally-relevant coping strategies. Differences between objective and perceived stress suggest that these mere exposure to acculturative stressors can have an impact on mental health, even if youth do not perceive them to be particularly stressful. The results of this study provide guidance in beginning work with refugee and immigrant adolescents. Findings on immigration status and protective and vulnerable coping strategies can be used a helpful basis in the development of treatment and intervention programs facilitating mental health functioning in these youth.

APPENDIX A

MEASURES

The Acculturative Hassles Inventory—Perceived Stress

Below is the same list of problems that kids may have at school, home, or with peers after they or their family has moved to a new country. This time, please read each one carefully and circle how much it bothers you using one of the choices on the sheet in from of you.

0	1	2	3	4
Does not apply	Not at all a hassle	A little bit of a hassle	Somewhat of a hassle	A very big hassle

Discrimination–School

1. You heard people saying bad things or making jokes about Africans, or people of your ethnic group.	0	1	2	3	4
2. A teacher told you that you shouldn't speak your home language in class or in the school.	0	1	2	3	4
3. You saw another African student, or student of your ethnic group treated badly or discriminated against.	0	1	2	3	4
4. You were bored in class because you already studied the material in the country you moved from.	0	1	2	3	4
5. Someone put you down for not speaking English correctly, for example, your accent.	0	1	2	3	4
6. American students rejected you in some way.	0	1	2	3	4
7. A teacher treated you unfairly because you are African.	0	1	2	3	4
8. An American student treated you badly because you are African.	0	1	2	3	4
9. Someone made fun of you because you did not look "American" (clothing, hairstyle, and so on).	0	1	2	3	4
10. A school administrator treated you unfairly because you are African.	0	1	2	3	4
11. You got in trouble in school because you did not understand how the school rules work.	0	1	2	3	4

Peer

12. You tried to make friends with an American student.	0	1	2	3	4
13. You tried to make friends with an African student, or student of your ethnic group.	0	1	2	3	4
14. You tried to get a date with an American guy/girl.	0	1	2	3	4
15. You had an argument or fight with a African friend, or friend from your ethnic group.	0	1	2	3	4
16. You tried to get a date with an African guy/girl, or guy/girl from your ethnic group.	0	1	2	3	4
17. You had an argument or fight with an American friend.	0	1	2	3	4
18. You went out with your American boy/girlfriend along with a group of African friends.	0	1	2	3	4
19. You had to choose whether to socialize with an American or an African group of friends.	0	1	2	3	4
20. You had a misunderstanding on a date because of cultural differences.	0	1	2	3	4

0	1	2	3	4
Does not apply	Not at all a hassle	A little bit of a hassle	Somewhat of a hassle	A very big hassle

English language

21. You couldn't express a thought you had in English.	0	1	2	3	4
22. Someone said something to you in English that you couldn't understand.	0	1	2	3	4
23. You could not understand something that you read in a book or newspaper because it was in English.	0	1	2	3	4

24. You could not understand something that a teacher said in class because of English.	0	1	2	3	4
25. You could not understand something on TV, because it was in English.	0	1	2	3	4

Family□

26. You had to translate for other family members: phone calls, mail, bills, TV.□	0	1	2	3	4
27. You had to accompany family members to appointments, to translate.□	0	1	2	3	4
28. You could not explain something to your parents, because they don't understand American culture.	0	1	2	3	4
29. Your parents told you to speak, read, or write in your home language.	0	1	2	3	4
30. You had to explain American culture to parents.	0	1	2	3	4
31. You had a problem that parents could not help you with, because they do not understand the American school system.	0	1	2	3	4
32. Your parents did something that embarrassed you, because they did not act like Americans.	0	1	2	3	4
33. Your parents told you to speak, read, or write in English.	0	1	2	3	4
34. Your parents told you that they prefer that you date an African or someone from your ethnic group.□	0	1	2	3	4
35. Your parents criticized you, because they think that you are becoming too American.	0	1	2	3	4
36. Your parents told you that you should spend more time with Africans or people	0	1	2	3	4

of your ethnic group.					
37. People in your family accused you of not being proud of your ethnic group's heritage.	0	1	2	3	4
38. Your parents told you that they prefer that you date an American.	0	1	2	3	4
39. Your parents told you that you should spend more time with Americans.	0	1	2	3	4

The Acculturative Hassles Inventory—Stressors

Below is a list of problems that kids may have at school, home, or with peers after they or their family has moved to a new country. Please read each one carefully and circle how many times each may have happened to you in the *past three months*.

0	1	2	3	4
Never	1 to 2 times	3 to 5 times	6 to 10 times	More than 10 times

Discrimination–School

1. You heard people saying bad things or making jokes about Africans, or people of your ethnic group.	0	1	2	3	4
2. A teacher told you that you shouldn't speak your home language in class or in the school.	0	1	2	3	4
3. You saw another African student, or student of your ethnic group treated badly or discriminated against.	0	1	2	3	4
4. You were bored in class because you already studied the material in the country you moved from.	0	1	2	3	4
5. Someone put you down for not speaking English correctly, for example, your accent.	0	1	2	3	4
6. American students rejected you in some way.	0	1	2	3	4
7. A teacher treated you unfairly because you are African.	0	1	2	3	4
8. An American student treated you badly because you are African.	0	1	2	3	4
9. Someone made fun of you because you did not look "American" (clothing, hairstyle, and so on).	0	1	2	3	4
10. A school administrator treated you unfairly because you are African.	0	1	2	3	4
11. You got in trouble in school because you did not understand how the school rules work.	0	1	2	3	4

Peer

12. You tried to make friends with an American student.	0	1	2	3	4
13. You tried to make friends with an African student, or student of your ethnic group.	0	1	2	3	4
14. You tried to get a date with an American guy/girl.	0	1	2	3	4
15. You had an argument or fight with a African friend, or friend from your ethnic group.	0	1	2	3	4
16. You tried to get a date with an African guy/girl, or guy/girl from your ethnic group.	0	1	2	3	4
17. You had an argument or fight with an American friend.	0	1	2	3	4
18. You went out with your American boy/girlfriend along with a group of African friends.	0	1	2	3	4
19. You had to choose whether to socialize with an American or an African group of friends.	0	1	2	3	4
20. You had a misunderstanding on a date because of cultural differences.	0	1	2	3	4

0	1	2	3	4
Never	1 to 2 times	3 to 5 times	6 to 10 times	More than 10 times

English language

21. You couldn't express a thought you had in English.	0	1	2	3	4
22. Someone said something to you in English that you couldn't understand.	0	1	2	3	4
23. You could not understand something that you read in a book or newspaper because it was in English.	0	1	2	3	4
24. You could not understand something that a teacher said in class because of English.	0	1	2	3	4
25. You could not understand something on	0	1	2	3	4

TV, because it was in English.					

Family□

26. You had to translate for other family members: phone calls, mail, bills, TV.	0	1	2	3	4
27. You had to accompany family members to appointments, to translate.	0	1	2	3	4
28. You could not explain something to your parents, because they don't understand American culture.	0	1	2	3	4
29. Your parents told you to speak, read, or write in your home language.	0	1	2	3	4
30. You had to explain American culture to parents.	0	1	2	3	4
31. You had a problem that parents could not help you with, because they do not understand the American school system.	0	1	2	3	4
32. Your parents did something that embarrassed you, because they did not act like Americans.	0	1	2	3	4
33. Your parents told you to speak, read, or write in English.	0	1	2	3	4
34. Your parents told you that they prefer that you date an African or someone from your ethnic group.	0	1	2	3	4
35. Your parents criticized you, because they think that you are becoming too American.	0	1	2	3	4
36. Your parents told you that you should spend more time with Africans or people of your ethnic group.	0	1	2	3	4
37. People in your family accused you of not being proud of your ethnic group's	0	1	2	3	4

heritage.					
38. Your parents told you that they prefer that you date an American.	0	1	2	3	4
39. Your parents told you that you should spend more time with Americans.	0	1	2	3	4

Y-ACSI

Instructions

The statements below represent some ways people cope with problems or stressful situations in their daily lives. Before you respond to the statements below, you will need to think of something stressful related to your or your family's culture that happened to you within the past three months. A "stressful situation" is any problem or situation that you find troubling or causes you to worry. These problems may be related to your language, cultural identity, or cultural practices and could happen with your family, friends, school, relationships, or other things you consider important in your life. To help us understand the stressful situation you are thinking of when responding to the statements in this survey, please write one or two sentences that describes what happened in the situation you are thinking of.

Use this space to describe your stressful situation:

DID YOU REMEMBER TO DESCRIBE YOUR STRESSFUL SITUATION?

A. Circle the number that shows how stressful this problem was for you or how much you worried about it.

1	2	3	4
Not at all	A little	Somewhat	Very

B. Circle the number that shows how much control you think you have over this problem.

1	2	3	4
Not at all	A little	Somewhat	Very

Think of the stressful situation that has been a problem for you. For each item on the list below, circle **<u>one</u>** number from 1 (not at all) to 4 (a lot) that shows **how much** you do these things when you have problems like these. Please let us know about everything you do, think, and feel, even if it doesn't make things better.

1	**2**	**3**	**4**
Not at all	**A little**	**Some**	**A Lot**

1. I try to make other people laugh so that I feel better about my problems. **1 2 3 4**
2. When things don't go my way, I just accept the way things are. **1 2 3 4**
3. I just accept that I cannot change what has happened. **1 2 3 4**
4. I tell myself that I've got to be patient and believe in myself. **1 2 3 4**
5. I try to make things better by being nice to others. **1 2 3 4**
6. I try to make things better by trying to see things from someone else's point of view. **1 2 3 4**
7. I try to make things better by being respectful to other people. **1 2 3 4**
8. When I have a problem with someone, I try to talk to them about it. and work it out. **1 2 3 4**
9. I listen to music or the radio. **1 2 3 4**
10. I listen to my favorite song over and over. **1 2 3 4**
11. I play a contact sport (like basketball or football) to let my feelings out. **1 2 3 4**
12. I work on my athletic moves to take my mind off my problems. **1 2 3 4**
13. When I have a problem, I try to relax or do something relaxing. **1 2 3 4**
    Check all that you do:
    - □ Lying down and putting something over my head.
    - □ Going to sleep
    - □ Soaking in the bathtub
    - □ Taking deep breaths
    - □ Other _____
14. I dance or make up dance routines to take my mind off the problems. **1 2 3 4**
15. I dance with a group of friends. **1 2 3 4**
16. I try to make things better by doing right by people. **1 2 3 4**
17. I remember what someone else (like mom, dad, grandmother, friend) told me to do about the problem. **1 2 3 4**
18. When I have a problem, I write. **1 2 3 4**
    Check all that you do:
    - □ Poetry

□ Songs
□ Raps/rhymes
□ Short stories
□ Other _____

19. When I have a problem, I write in a notebook, diary or journal. **1 2 3 4**

20. When I have a problem, I do something artistic. **1 2 3 4**
Check all that you do:
□ Drawing, painting, sketching
□ Singing
□ Playing an instrument (drum, piano)
□ Other _____

21. When I have a problem, I sing. **1 2 3 4**

22. I sing my favorite song over and over again. **1 2 3 4**

23. I make sure I am around other people and am not alone. **1 2 3 4**

24. I spend time around my friends. **1 2 3 4**

25. I spend time around my family. **1 2 3 4**

26. I do things to look my best. **1 2 3 4**
Check all that you do:
□ Get my nails done
□ Get my hair done or hair cut
□ Put on my favorite clothes
□ Put on my favorite jewelry
□ Other _____

27. I talk about the problem to someone in my family. **1 2 3 4**
Check all that you talk to:
□ My Mother/Father
□ My Grandmother/Grandfather
□ My Brother/Sister
□ My Auntie/Uncle
□ My Cousin(s)
□ My Godmother/Godfather
□ My Godbrother/Godsister
□ Other _____

28. I talk about the problem to someone my age outside of my family. **1 2 3 4**
Check all that you talk to:
□ My Friend
□ My Girlfriend/Boyfriend
□ My "play" cousin, brother, or sister
□ Other _____

29. I talk about the problem to an adult outside of my family. **1 2 3 4**
    Check all that you talk to:
    - □ My pastor
    - □ A teacher
    - □ A doctor
    - □ My friend's mother or father
    - □ Other _____

30. I talk about the problem with someone I can trust. **1 2 3 4**

31. I talk about the problem with someone who understands what I am going through. **1 2 3 4**

32. I call someone to talk about my problem. **1 2 3 4**

33. I listen to other people's point of view. **1 2 3 4**

34. I pray or talk to God. **1 2 3 4**

35. I go to church or mosque to feel better. **1 2 3 4**

36. I ask someone to pray for me. **1 2 3 4**

37. I read my Bible or Qur'an. **1 2 3 4**

38. I put it in God's hands. **1 2 3 4**

39. I write down my prayers or write a note to God. **1 2 3 4**

40. I ask God for strength. **1 2 3 4**

41. I think about somebody I respect and how he/she might handle the problem. **1 2 3 4**

42. I repeat to myself over and over that everything is okay. **1 2 3 4**

43. I first try to deal with it myself, then if I can't deal with it, I get help from someone else. **1 2 3 4**

44. I try to focus on the present (here-and-now) rather than what might happen in the future. **1 2 3 4**

45. I think about what a relative who has passed away would tell me to do. **1 2 3 4**

46. I kept something from someone close to me who died, and I use it when I have a problem. **1 2 3 4**

47. I go to a quiet, special, or sacred place. **1 2 3 4**

48. Someone in my family has special powers, and they tell me what to do about my problem. **1 2 3 4**

49. Someone in my family has special powers, and they make things better. **1 2 3 4**

50. I tried to get as many people as I could to help me. **1 2 3 4**

51. I helped my family with things around the house. **1 2 3 4**

52. I think about a story that someone in my family told me. **1 2 3 4**

HICUPS-R1

Instructions

"When events like the one you wrote above happen, people think or do many different things to make their situation better, or to make themselves feel better. Please tell us how much you thought or did each of the different things listed below to try and make things better or to make yourself feel better when this event happened. There are no right or wrong answers, just mark how often you did each of these things during the event you just described"

1. *When you had this problem in the past 3 months,* you thought about what you could do before you did something.

Never	Sometimes	Often	Most of the time
1	2	3	4

2. You tried to notice or think about only the good things in your life.

Never	Sometimes	Often	Most of the time
1	2	3	4

3. You tried to ignore it.

Never	Sometimes	Often	Most of the time
1	2	3	4

4. You told people how you felt about the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

5. You tried to stay away from the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

6. You did something to make things better.

Never	Sometimes	Often	Most of the time
1	2	3	4

7. *When you had this problem,* you talked to someone who could help you figure out what to do.

Never	Sometimes	Often	Most of the time
1	2	3	4

8. You told yourself that things would get better.

Never	Sometimes	Often	Most of the time
1	2	3	4

9. You listened to music.

Never	Sometimes	Often	Most of the time
1	2	3	4

10. You reminded yourself that you are better off than a lot of other kids.

Never	Sometimes	Often	Most of the time
1	2	3	4

11. You daydreamed that everything was okay.

Never	Sometimes	Often	Most of the time
1	2	3	4

12. You went bicycle riding.

Never	Sometimes	Often	Most of the time
1	2	3	4

13. You talked about your feelings to someone who really understood.

Never	Sometimes	Often	Most of the time
1	2	3	4

14. You told other people what you wanted them to do.

Never	Sometimes	Often	Most of the time
1	2	3	4

15. You tried to put it out of your mind.

Never	Sometimes	Often	Most of the time
1	2	3	4

16. *When you had this problem,* you thought about what would happen before you decided what to do.

Never	Sometimes	Often	Most of the time
1	2	3	4

17. You told yourself that it would be OK.

Never	Sometimes	Often	Most of the time
1	2	3	4

18. You told other people what made you feel the way you did.

Never	Sometimes	Often	Most of the time
1	2	3	4

19. You told yourself that you could handle this problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

20. You went for a walk.

Never	Sometimes	Often	Most of the time
1	2	3	4

21. You tried to stay away from things that made you feel upset.

Never	Sometimes	Often	Most of the time
1	2	3	4

22. You told others how you would like to solve the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

23. You tried to make things better by changing what you did.

Never	Sometimes	Often	Most of the time
1	2	3	4

24. You told yourself you have taken care of things like this before.

Never	Sometimes	Often	Most of the time
1	2	3	4

25. *When you had this problem,* you played sports.

Never	Sometimes	Often	Most of the time
1	2	3	4

26. You thought about why it happened.

Never	Sometimes	Often	Most of the time
1	2	3	4

27. You didn't think about it.

Never	Sometimes	Often	Most of the time
1	2	3	4

28. You let other people know how you felt.

Never	Sometimes	Often	Most of the time
1	2	3	4

29. You told yourself you could handle what ever happens.

Never	Sometimes	Often	Most of the time
1	2	3	4

30. You told other people what you would like to happen.

Never	Sometimes	Often	Most of the time
1	2	3	4

31. You told yourself that in the long run, things would work out for the best.

Never	Sometimes	Often	Most of the time
1	2	3	4

32. You read a book or magazine.

Never	Sometimes	Often	Most of the time
1	2	3	4

33. You imagined how you'd like things to be.

Never	Sometimes	Often	Most of the time
1	2	3	4

34. *When you had this problem,* you reminded yourself that you knew what to do.

Never	Sometimes	Often	Most of the time
1	2	3	4

35. You thought about which things are best to do to handle the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

36. You just forgot about it.

Never	Sometimes	Often	Most of the time
1	2	3	4

37. You told yourself that it would work itself out.

Never	Sometimes	Often	Most of the time
1	2	3	4

38. You talked to someone who could help you solve the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

39. You went skateboard riding or roller skating.

Never	Sometimes	Often	Most of the time
1	2	3	4

40. You avoided the people who made you feel bad.

Never	Sometimes	Often	Most of the time
1	2	3	4

41. You reminded yourself that overall things are pretty good for you.

Never	Sometimes	Often	Most of the time
1	2	3	4

42. You did something like video games or a hobby.

Never	Sometimes	Often	Most of the time

1	2	3	4

43. *When you had this problem,* you did something to solve the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

44. You tried to understand it better by thinking more about it.

Never	Sometimes	Often	Most of the time
1	2	3	4

45. You reminded yourself about all the things you have going for you.

Never	Sometimes	Often	Most of the time
1	2	3	4

46. You wished that bad things wouldn't happen.

Never	Sometimes	Often	Most of the time
1	2	3	4

47. You thought about what you needed to know so you could solve the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

48. You avoided it by going to your room.

Never	Sometimes	Often	Most of the time
1	2	3	4

49. You did something in order to get the most you could out of the situation.

Never	Sometimes	Often	Most of the time
1	2	3	4

50. You thought about what you could learn from the problem.

Never	Sometimes	Often	Most of the time
1	2	3	4

51. You wished that things were better.

Never	Sometimes	Often	Most of the time
1	2	3	4

52. You watched TV.

Never	Sometimes	Often	Most of the time
1	2	3	4

53. You did some exercise.

Never	Sometimes	Often	Most of the time
1	2	3	4

54. You tried to figure out why things like this happen.

Never	Sometimes	Often	Most of the time
1	2	3	4

ACES-IQ
EXPOSURE TO WAR/COLLECTIVE VIOLENCE

These questions are about whether YOU did or did not experience any of the following events when you were a child. The events are all to do with collective violence, including wars, terrorism, political or ethnic conflicts, genocide, repression, disappearances, torture and organized violent crime such as banditry and gang.
Please circle the category that best describes your experience.

When you were growing up…

1. Were you forced to go and live in another place due to any of these events?

Many times	A few times	Once	Never	I prefer not to answer

2. Did you experience the deliberate destruction of your home due to any of these events?

Many times	A few times	Once	Never	I prefer not to answer

3. Were you beaten up by soldiers, police, militia, or gangs?

Many times	A few times	Once	Never	I prefer not to answer

4. Was a family member or friend killed or beaten up by soldiers, police, militia, or gangs?

Many times	A few times	Once	Never	I prefer not to answer

CPSS – Part I

Below is a list of problems that kids sometimes have after experiencing an upsetting event. Read each one carefully and circle the number (0-3) that best describes how often that problem has bothered you IN THE LAST 2 WEEKS.

Please write down your most distressing event:

_____

_____

Length of time since the event:

_____

0	1	2	3
Not at all or only at one time	Once a week or less/ once in a while	2 to 4 times a week/ half the time	5 or more times a week/almost always

1.	0	1	2	3	Having upsetting thoughts or images about the event that came into your head when you didn't want them to
2.	0	1	2	3	Having bad dreams or nightmares
3.	0	1	2	3	Acting or feeling as if the event was happening again (hearing something or seeing a picture about it and feeling as if I am there again)
4.	0	1	2	3	Feeling upset when you think about it or hear about the event (for example, feeling scared, angry, sad, guilty, etc)
5.	0	1	2	3	Having feelings in your body when you think about or hear about the event (for example, breaking out into a sweat, heart beating fast)
6.	0	1	2	3	Trying not to think about, talk about, or have feelings about the event
7.	0	1	2	3	Trying to avoid activities, people, or places that remind you of the traumatic event
8.	0	1	2	3	Not being able to remember an important part of the upsetting event
9.	0	1	2	3	Having much less interest or doing things you used to do
10.	0	1	2	3	Not feeling close to people around you

11.	0	1	2	3	Not being able to have strong feelings (for example, being unable to cry or unable to feel happy)
12.	0	1	2	3	Feeling as if your future plans or hopes will not come true (for example, you will not have a job or getting married or having kids)
13.	0	1	2	3	Having trouble falling or staying asleep
14.	0	1	2	3	Feeling irritable or having fits of anger
15.	0	1	2	3	Having trouble concentrating (for example, losing track of a story on the television, forgetting what you read, not paying attention in class)
16.	0	1	2	3	Being overly careful (for example, checking to see who is around you and what is around you)
17.	0	1	2	3	Being jumpy or easily startled (for example, when someone walks up behind you)

ASEBA

Please print

YOUTH SELF-REPORT FOR AGES 11-18

For office use only
ID #

YOUR FULL NAME First Middle Last

YOUR GENDER ☐ Boy ☐ Girl

YOUR AGE

YOUR ETHNIC GROUP OR RACE

TODAY'S DATE Mo._____ Date _____ Yr. _____

YOUR BIRTHDATE Mo._____ Date _____ Yr. _____

GRADE IN SCHOOL _____

NOT ATTENDING SCHOOL ☐

IF YOU ARE WORKING, PLEASE STATE YOUR TYPE OF WORK:

_____

_____

PARENTS' USUAL TYPE OF WORK, even if not working now. *(Please be specific — for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)*

FATHER'S TYPE OF WORK _____

MOTHER'S TYPE OF WORK _____

Please fill out this form to reflect *your* views, even if other people might not agree. Feel free to print additional comments beside each item and in the spaces provided on pages 2 and 4. ***Be sure to answer all items.***

I. Please list the sports you most like to take part in. For example: swimming, baseball, skating, skateboarding, bike riding, fishing, etc.

☐ None

	Compared to others of your age, about how much time do you spend in each?			Compared to others of your age, how well do you do each one?		
	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

II. Please list your favorite hobbies, activities, and games, other than sports. For example: cards, books, plants, cars, computers, crafts, etc. (Do not include listening to music or watching TV.)

☐ None

	Compared to others of your age, about how much time do you spend in each?			Compared to others of your age, how well do you do each one?		
	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

III. Please list any organizations, clubs, teams, or groups you belong to.

☐ None

	Compared to others of your age, how active are you in each?		
	Less Active	Average	More Active
a. _____	☐	☐	☐
b. _____	☐	☐	☐
c. _____	☐	☐	☐

IV. Please list any jobs or chores you have. For example: paper route, babysitting, raking leaf, working in store, etc. (Include both paid and unpaid jobs and chores.)

Compared to others of your age, how well do you carry them out?

	Below Average	Average	Above Average
☐ None			
a. ____	☐	☐	☐
b. ____	☐	☐	☐
c. ____	☐	☐	☐

Be sure you answered all items. Then see other side.

Page 1

Please print. Be sure to answer all items.

V. 1. About how many close friends do you have? (Do *not* include brothers & sisters)

☐ None ☐ 1 ☐ 2 or 3 ☐ 4 or more

2. About how many times a week do you do things with any friends outside of regular school hours? (Do *not* include brothers & sisters)

☐ Less than 1 ☐ 1 or 2 ☐ 3 or more

VI. Compared to others of your age, how well do you:

	Worse	Average	Better	
a. Get along with your brothers & sisters?	☐	☐	☐	☐ I have no brothers or sisters
b. Get along with other kids?	☐	☐	☐	
c. Get along with your parents?	☐	☐	☐	
d. Do things by yourself?	☐	☐	☐	

VII. 1. Performance in academic subjects. ☐ I do not attend school because ____

Check a box for each subject that you take	Failing	Below Average	Average	Above Average
a. English or Language Arts	☐	☐	☐	☐
b. History or Social Studies	☐	☐	☐	☐
c. Arithmetic or Math	☐	☐	☐	☐
d. Science	☐	☐	☐	☐
e. ____	☐	☐	☐	☐
f. ____	☐	☐	☐	☐
g. ____	☐	☐	☐	☐

Other academic subjects (for example computer courses, foreign language, business, Do not include gym, shop, driver's ed., or other nonacademic subjects.)

Do you have any illness, disability, or handicap? ☐ No ☐ Yes—please describe:

Please describe any concerns or problems you have about school:

Please describe any other concerns you have:

Please describe the best things about yourself:

Page 2

Be sure you answered all items.

Please print. Be sure to answer all items.

Below is a list of items that describe kids. For each item that describes you ***now or within the past 6 months***, please circle the ***2*** if the item is ***very true or often true*** of you. Circle the ***1*** if the item is ***somewhat or sometimes true*** of you. If the item is ***not true*** of you, circle the ***0***.

0 = Not True **1 = Somewhat or Sometimes True** **2 = Very True or Often True**

0 1 2 1. I act too young for my age
0 1 2 2. I drink alcohol without my parents' approval
(describe): _____
_____
0 1 2 3. I argue a lot
0 1 2 4. I fail to finish things that I start
0 1 2 5. There is very little that I enjoy
0 1 2 6. I like animals
0 1 2 7. I brag
0 1 2 8. I have trouble concentrating or paying attention
0 1 2 9. I can't get my mind off certain thoughts;
(describe): _____
_____
0 1 2 10. I have trouble sitting still
0 1 2 11. I am too dependent on adults
0 1 2 12. I feel lonely
0 1 2 13. I feel confused or in a fog
0 1 2 14. I cry a lot
0 1 2 15. I am pretty active
0 1 2 16. I am mean to others
0 1 2 17. I daydream a lot
0 1 2 18. I deliberately try to hurt or kill myself
0 1 2 19. I try to get a lot of attention
0 1 2 20. I destroy my own things
0 1 2 21. I destroy things belonging to others
0 1 2 22. I disobey my parents
0 1 2 23. I disobey at school
0 1 2 24. I don't eat as well as I should
0 1 2 25. I don't get along with other kids
0 1 2 26. I don't feel guilty after doing something I shouldn't

0 1 2 33. I feel that no one loves me
0 1 2 34. I feel that others are out to get me
0 1 2 35. I feel worthless or inferior
0 1 2 36. I accidentally get hurt a lot
0 1 2 37. I get in many fights
0 1 2 38. I get teased a lot
0 1 2 39. I hang around with kids who get in trouble
0 1 2 40. I hear sounds or voices that other people think aren't there (describe): _____
_____
_____
0 1 2 41. I act without stopping to think
0 1 2 42. I would rather be alone than with others
0 1 2 43. I lie or cheat
0 1 2 44. I bite my fingernails
0 1 2 45. I am nervous or tense
0 1 2 46. Parts of my body twitch or make nervous movements (describe): _____
_____
_____
0 1 2 47. I have nightmares
0 1 2 48. I am not liked by other kids
0 1 2 49. I can do certain things better than most kids
0 1 2 50. I am too fearful or anxious
0 1 2 51. I feel dizzy or lightheaded
0 1 2 52. I feel too guilty
0 1 2 53. I eat too much
0 1 2 54. I feel overtired without good reason
0 1 2 55. I am overweight
56. Physical problems ***without known medical***

0 1 2 [illegible] I should!

0 1 2 27. I am jealous of others

0 1 2 28. I break rules at home, school, or elsewhere

0 1 2 29. I am afraid of certain animals, situations, or places, other than school (describe): _____

0 1 2 30. I am afraid of going to school

0 1 2 31. I am afraid I might think or do something bad

0 1 2 32. I feel that I have to be perfect

cause:

0 1 2 a. Aches or pains (not stomach or headaches)

0 1 2 b. Headaches

0 1 2 c. Nausea, feel sick

0 1 2 d. Problems with eyes (not if corrected by glasses) (describe): _____

0 1 2 e. Rashes or other skin problems

0 1 2 f. Stomachaches

0 1 2 g. Vomiting, throwing up

0 1 2 h. Other (describe): _____

PAGE 3 ***Be sure you answered all items. Then see other side.***

Please print. Be sure to answer all items.

0 = Not True **1 = Somewhat or Sometimes True** **2 = Very True or Often True**

0 1 2 57. I physically attack people

0 1 2 58. I pick my skin or other parts of my body (describe): _____

0 1 2 59. I can be pretty friendly

0 1 2 60. I like to try new things

0 1 2 61. My school work is poor

0 1 2 62. I am poorly coordinated or clumsy

0 1 2 63. I would rather be with older kids than kids my [illegible]

0 1 2 71. I am self-conscious or easily embarrassed

0 1 2 72. I set fires

0 1 2 73. I can work well with my hands

0 1 2 74. I show off or clown

0 1 2 75. I am too shy or timid

0 1 2 76. I sleep less than most kids

0 1 2 77. I sleep more than most kids during day and/or night (describe): _____

0 1 2 78. I am inattentive or easily distracted

0 1 2 79. I have a speech problem (describe): _____

0 1 2 80. I stand up for my rights

0 1 2 81. I steal at home

0 1 2 82. I steal from places other than home

0 1 2 83. I store up too many things I don't need (describe): _____

0 1 2 84. I do things other people think are strange (describe): _____

0 1 2 85. I have thoughts that other people would think are strange (describe): _____

0 1 2 86. I am stubborn

0 1 2 87. My moods or feelings change suddenly

0 1 2 88. I enjoy being with people

0 1 2 [illegible]

0 1 2 100. I have trouble sleeping (describe): _____

0 1 2 101. I cut classes or skip school

0 1 2 102. I don't have much energy

0 1 2 103. I am unhappy, sad, or depressed

0 1 2 104. I am louder than other kids

0 1 2 105. I use drugs for nonmedical purposes (don't include alcohol or tobacco) (describe): _____

0 1 2 106. I like to be alone

0 1 2 107. I am a good joke

0 1 2 108. I like to take life easy

0 1 2 109. I try to help other people when I can

0 1 2 110. I wish I were of the opposite sex

0 1 2 111. I keep from getting involved with others

0 1 2 112. I worry a lot

Please be sure you answered all items

Please write down anything else that describes your feelings, behavior, or interests:

Demographic Questionnaire

1. MALE FEMALE

2. How old are you? _____

3a. Put an X by category that best describes your family:

I moved to the United States (with or without your family) _____
My mother/father/both (circle one) moved to the United States, I was born here _____
My grandparent(s) moved to the United States, my parent(s) and I were born here _____
Other: _____

3b. What country are your parents from? _____

4. Why did you/your family move to the United States?
_____
_____
_____
_____
_____

5. How many years have you/your family been in the United States?
_____

6. How old were you when you moved to the United States?
_____

7. What grade are you in now? _____

8. What language do you speak at home?
_____

9. What is your religion?
_____

10. What is your zip code?
_____

11. What race do you consider yourself to be (e.g. Black, White, Asian)?
_____

12. What is your ethnicity?

_____

UNDERSTANDING HOW ADOLESCENTS COPE WITH ACCULTURATION STRESS
PARENT CONSENT FORM

WHY IS THIS STUDY BEING DONE?

Your child is invited to participate in a research project being run by Emma-Lorraine Bart-Plange, a graduate student from Loyola University Chicago. All eligible youth whose families are a part of Pan African Association will be asked to participate. We want to know more about youths' experiences with stress related to living in a new country, how they decide to cope with it, and how it affects their feelings and behavior. Understanding this information will help us to make recommendations for services for these youth in the future. We ask that you carefully read through the information below.

WHAT WILL MY CHILD BE ASKED TO DO?

- First, we will ask your child to complete a packet of pencil-and-paper surveys during a time we set up at the Pan African Association. Students who receive written permission from their parents will complete their surveys in a room with other students from the program. Researchers from Loyola will be there to help all of the students to complete the surveys and to answer any questions. The surveys will take around 40 minutes to finish.
    - There will be no right or wrong answers to the surveys. This is **not** a test.
    - We will ask your child to answer questions about the types of stress they face, how they cope with it, and how it makes them feel or act.

WHAT ARE THE POSSIBLE RISKS OF THE STUDY?

Although the chance of risks is small, some of the coping and stress questions may bring up unpleasant thoughts or feelings. Some of the questions ask about whether or not certain problems have happened. These problems include being made fun of because of their culture, arguing with family members, and missing their country or origin. Your child does not have to answer any questions that he or she does not wish to answer. Your child can write "skip" next to any item that they do not want to answer. There will be no penalty for skipping an item. There will be NO consequences if they decide not to be a part of the study or not to finish.

If anything on the surveys makes your child feel worried, angry, or sad, the researcher will stop the surveys and talk to your child alone to answer any questions or address concerns. If needed, the researcher will go with your child to talk to the Pan African Association staff. If you have questions or concerns, you can call Emma-Lorraine Bart-Plange at (773) 508-2986. There will be NO penalty if your child decides to withdraw or not to finish.

ARE THERE BENEFITS TO TAKING PART IN THE STUDY?

Your child will not receive any direct benefits from being in this study. The surveys will help us to know what ways of coping best help stress from moving to a new culture. What we learn can help us to better understand the stressors youth face, and their coping skills and create programs that teach and support positive coping skills for students.

WHAT WILL WE RECEIVE FOR PARTICIPATING?
Each student who participates in the focus group will be given a $10 Target gift card for completion of the survey packet.

WHO WILL KNOW ABOUT WHAT MY CHILD DID OR SAID IN THE STUDY?
All of the answers that the researchers collect are private—no student's name or other identifying information will be on the forms. The survey packets will be kept in a locked file cabinet in the Parents and Children Coping Together lab at Loyola University Chicago. Only the researchers will have access to the surveys. Your child will never be mentioned by name in anything the researchers write about the project. No information about any child's answers will be made available to any staff at the Pan African Association.
Due to privacy issues, you will not be allowed to view your child's answers. Information presented to Pan African Association staff, parents, at conferences or for publication will not identify any students who participated. After the study ends, the surveys will be destroyed.

ARE THERE TIMES WHEN MY CHILD'S INFORMATION MAY BE RELEASED?
If it becomes clear to the researcher during the meetings that a student is dealing with physical or sexual abuse, the researcher is required by law to contact Child Protective Services in the best interest of your child. Also, if you or your child tells the researcher that he or she is in current danger to him/herself or other people, the researcher is required by law to contact the proper agencies. If any of these issues come up, the researcher will first talk with your child in private. If needed, the researcher will then ask your child to speak with the Pan African Association staff and go with them to talk with the Pan African Association Staff. Next, if the researcher feels that he or she needs to call an agency, as mandated by law, the researcher will contact the appropriate agency. All calls will be made on-site from Pan African Association and we will follow any Pan African Association guidelines for any calls.

WHAT ARE MY RIGHTS AND MY CHILD'S RIGHTS AS A RESEARCH PARTICIPANT?
Your child's participation in the research project is voluntary. You have the right to decide if your child will be in this study. By signing this consent form, you agree to your child being in this study. You have the right to take your child out of this study at any time without penalty by calling Emma-Lorraine Bart-Plange. Your child also has the right to choose not to be in the study. If your child decides not to be in the study or to

leave the study, there will be no penalties. If you have any questions at any time, please contact Emma-Lorraine Bart-Plange at (773) 508-2986.

If you have questions about your child's rights as a research participant, you may contact Loyola University's Office of University Research Services at (773) 508-2689.

PLEASE SIGN BELOW AND RETURN THE FORM TO A PAN AFRICAN ASSOCIATION MEETING WITH YOUR CHILD

I agree to allow my child to participate in this study. I have read and understand the information above. I have had a chance to ask questions and all of my questions have been answered.

_____

Name of Child (PLEASE PRINT)

_____ _____

Name of Parent/Guardian (PLEASE PRINT) **Phone Number**

_____ _____

Parent/Guardian Signature **Date**

_____

Researcher Signature

UNDERSTANDING HOW ADOLESCENTS COPE WITH ACCULTURATION STRESS
YOUTH ASSENT FORM

WHAT IS THIS STUDY ABOUT? You are being asked to be part of a research project from the Parents and Children Coping Together (PACCT) lab at Loyola University Chicago. We want to know more about youths' experiences with stress related to living in a new country, how they decide to cope with it, and how it affects their feelings and behavior. Understanding this information will help us to make recommendations for services for these youth in the future. This project is being done by Emma-Lorraine Bart-Plange, a graduate student from Loyola University Chicago. We ask that you carefully read through the following information. You and your parent(s) decide whether or not you want to be in the study and you may stop participating at any time. We would like to explain how the project works below.

WHAT WILL I BE ASKED TO DO? If you participate in the project, you will meet with students from Loyola University during a meeting the Pan African Association. You will complete a packet of surveys with other participants and students from Loyola University will be available to help you complete the surveys and answer any questions that you may have. This is not a test. There are no right or wrong answers. You will be asked to answer questions about experiences with stress related to your culture, coping with stress, how it makes you feel or act, and demographic information.

WHAT ARE THE RISKS OF THE STUDY? Some of the coping and stress questions may bring up unpleasant thoughts or feelings. If anything makes you feel worried, angry, or sad, we will talk to you alone to answer any questions. If needed, we will ask you to meet with one of the Pan African Association staff. If you have questions, you can call Emma-Lorraine Bart-Plange at (773) 508-2986. You do not have to answer anything that you do not want to answer. There will be **no** penalty if you decide that you do not want to finish the questions.

WHAT ARE THE BENEFITS TO TAKING PART IN THE STUDY? There are no direct benefits to you for participating, but the research project is being done to help us to know what ways of coping best help stress from moving to a new culture. What is learned can help us to better understand cultural stress and coping skills and create programs that teach and support positive coping skills for students.

WHAT WILL I GET FOR PARTICIPATING? Each student who participates in the focus group will be given a $10 Target gift card for completions of the survey packet.

WHO WILL KNOW ABOUT WHAT I DID OR SAID IN THE STUDY? All of the information on your surveys will be private and confidential. In other words, we will **NOT** ask you to write your name on the survey. You will never be mentioned by name

in anything we write about the project. You will be given a code number that is linked to your name, but only the researcher will have access to the code. Your answers will not be shown to anyone at Pan African Association or your parents. The survey packets and audio recording will be kept in a locked file cabinet in the PACCT research lab at Loyola University. Only the researchers will have access to the surveys. The surveys will be destroyed after the study ends.

If you tell us that you are in danger because someone else is hurting you, or that you are a danger because you are hurting yourself or other people, the law requires us to tell the right person or agency. First, we will talk with you alone. Next, we may ask you to talk to one of the Pan African Association staff. We will go with you when you talk to the staff member. Next, if we feel that we need to call an agency, as mandated by law, we will call the appropriate agency from an office at Pan African Association.

Your participation is voluntary. Even if you have your parents' permission, you decide whether or not to be in the study. If you have any questions at any time, please contact Emma-Lorraine Bart-Plange at (773) 508-2986.

If you have questions about rights as a research participant, you may contact Loyola University Office of University Research Services at (773) 508-2689.

PLEASE SIGN BELOW AND RETURN THE ENTIRE FORM TO THE RESEARCHER

If you agree, you will be asked to complete a survey in a one-time session at Pan African Association. You will be compensated for your time.

☐ I agree to participate in this research project. I have read how this study works and what I will be asked to do. I have had a chance to ask questions and all of my questions have been answered.

☐ I DO NOT agree to participate in this research project.

_____ _____

Sign Your Name (write in cursive) **Print Your Name**

_____ _____

Write today's date **Researcher Signature**

REFERENCE LIST

Achenbach, T. M., & Rescorla, L. (2001). *ASEBA School-Age Forms & Profiles*. Burlington: Aseba.

Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American journal of preventive medicine*, *39*(1), 93-98.

Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., & Wiesner, M. (2010). Acculturative stress among documented and undocumented Latino immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, *32*(3), 362-384.

Avila, A. (2003, July 31). Organizations try to unite African immigrants. *Chicago Tribune.* Retrieved from http://articles.chicagotribune.com/2003-07-31/news/0307310153_1_african-immigrants-african-countries-home-countries

Ayers, T. S., Sandier, I. N., West, S. G., & Roosa, M. W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of personality*, *64*(4), 923-958. doi: 10.1111/j.1467-6494.1996.tb00949.x.

Belizaire, L. S., & Fuertes, J. N. (2011). Attachment, coping, acculturative stress, and quality of life among Haitian immigrants. *Journal of Counseling & Development*, *89*(1), 89-97. doi: 10.1002/j.1556-6678.2011.tb00064.x.

Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International migration review*, 491-511.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2010). *Immigrant youth. Acculturation, identity and adaptation* (pp. 17-43).

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2010). *Immigrant youth. Acculturation, identity and adaptation* (pp. 17-43).

Beru, L. (2010). Role of acculturation and stress factors among Black African immigrants (Doctoral dissertation, California State University, Sacramento)

Brantley, P. J., O'Hea, E. L., Jones, G., & Mehan, D. J. (2002). The influence of income level and ethnicity on coping strategies. *Journal of Psychopathology and Behavioral Assessment*, *24*(1), 39-45.

Brodzinsky, D. M., Elias, M. J., Steiger, C., Simon, J., Gill, M., & Hitt, J. C. (1992). Coping scale for children and youth: Scale development and validation. *Journal of Applied Developmental Psychology*, *13*(2), 195-214. doi: 10.1016/0193-3973(92)90029-H.

Brondolo, E., ver Halen, N. B., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine*, *32*, 64–88. doi:10.1007/s10865-008-9193-0.

[1]U.S. Department of State, Bureau of Population, Refugees, and Migration. (May 23, 2014). Refugee admissions program for Africa fact sheet. Retrieved from http://www.state.gov/j/prm/releases/onepagers/228692.htm

[2]U.S. Department of State, Bureau of Population, Refugees, and Migration. (July 1, 2014). FY13 refugee admissions statistics. Retrieved from http://www.state.gov/j/prm/releases/statistics/228666.htm

Buriel, R., Perez, W., De Ment, T. L., Chavez, D. V., & Moran, V. R. (1998). The relationship of language brokering to academic performance, biculturalism, and self-efficacy among Latino adolescents. *Hispanic Journal of Behavioral Sciences*, 20: 283–297.

Chambers, J. W., Kambon, K., Birdsong, B. D., Brown, J., & Dixon, P., & Robbins-Brinson, L. (1998). Africentric cultural identity and the stress experience of African American college students. *Journal of Black Psychology*, *24*, 368-396.

Chavez, D.V., Moran, V.R., Reid, S.L., & Lopez, L. (1997). Acculturative stress in children: A modification of the SAFE scale. Hispanic Journal of Behavioral Sciences, 19(34). doi: 10.1177/0739986397019100.

Cho, Y. B., & Haslam, N. (2010). Suicidal ideation and distress among immigrant adolescents: The role of acculturation, life stress, and social support. *Journal of youth and adolescence*, *39*(4), 370-379. doi: 10.1007/s10964-009-9415-y.

Choi, H. (2002). Understanding adolescent depression in ethnocultural context. *Advances in Nursing Science*, *25*(2), 71-85.

Chorpita, B. F., Moffitt, C. E., & Gray, J. (2005). Psychometric properties of the Revised Child Anxiety/depression Scale in a clinical sample. *Behaviour research and therapy*, *43*(3), 309-322. doi: 10.1016/j.brat.2004.02.004.

Clarke, A. T. (2006). Coping with interpersonal stress and psychosocial health among children and adolescents: A meta-analysis. *Journal of Youth and Adolescence*, *35*(1), 10-23.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.

Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, *101*(3), 393. doi: 10.1037/0033-2909.101.3.393.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological bulletin*, *127*(1), 87. doi: 10.1037//0033-2909.127.1.87.

Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, *13*(4), 347. doi: 10.1037/1099-9809.13.4.347.

del Valle, J. F., Bravo, A., & Lopez, M. (2010). Parents and peers as providers of support in adolescents' social network: a developmental perspective. *Journal of Community Psychology*, *38*(1), 16-27.

Dorner, L. M., Orellana, M. F., & Jiménez, R. (2008). “It's One of Those Things That You Do to Help the Family”: Language Brokering and the Development of Immigrant Adolescents. *Journal of Adolescent Research*. doi: 10.1177/0743558408317563.

Ebata, A. T., & Moos, R. H. (1991). Coping and adjustment in distressed and healthy adolescents. *Journal of Applied Developmental Psychology*, *12*(1), 33-54. doi: 10.1016/0193-3973(91)90029-4.

Eschenbeck, H., Kohlmann, C. W., & Lohaus, A. (2007). Gender differences in coping strategies in children and adolescents. *Journal of Individual Differences*, *28*(1), 18-26. doi: 10.1027/1614-0001.28.1.18.

Fields, L., & Prinz, R. J. (1997). Coping and adjustment during childhood and adolescence. *Clinical psychology review*, *17*(8), 937-976.

Foa, E. B., Johnson, K. M., Feeny, N. C., & Treadwell, K. R. (2001). The Child PTSD Symptom Scale: A preliminary examination of its psychometric properties. *Journal of clinical child psychology*, *30*(3), 376-384.

Gaylord-Harden, N. K. & Cunningham, J. A. (2009). The impact of racial discrimination and coping strategies on internalizing symptoms in African American youth. Journal of Youth and Adolescence 38:532–543. DOI 10.1007/s10964-008-9377-5.

Gaylord-Harden, N. K., Cunningham, J. A., Holmbeck, G. N., & Grant, K. E. (2010). Suppressor effects in coping research with African American adolescents from low-income communities. *Journal of Consulting and Clinical Psychology*, *78*(6), 843. doi: 10.1037/a0020063.

Gaylord-Harden, N. K., Elmore, C. A., Campbell, C. L., & Wethington, A. (2011). An examination of the tripartite model of depressive and anxiety symptoms in African American youth: stressors and coping strategies as common and specific correlates. *Journal of Clinical Child & Adolescent Psychology*, *40*(3), 360-374. doi: 10.1080/15374416.2011.563467.

Gaylord-Harden, N. K., Mance, G., Gipson, P, & Grant, K. E. (2008). Coping patterns of African American adolescents: A confirmatory factor analysis and cluster analysis of the Children's Coping Strategies Checklist. Psychological Assessment 20(1), 10-22. DOI: 10.1037/1040-3590.20.1.10.

Griffith, M. A., Dubow, E. F., & Ippolito, M. F. (2000). Developmental and cross-situational differences in adolescents' coping strategies. *Journal of Youth and Adolescence*, *29*(2), 183-204.

Handwerk, M. L., Clopton, K., Huefner, J. C., Smith, G. L, Hoff, K. E., & Lucas, C. P. (2006). Gender differences in adolescents in residential treatment. American Journal of Orthopsychiatry, 76, 312-324.

Illinois Coalition for Immigrant and Refugee Rights (2009). *U.S. and Illinois immigrants by the numbers*. Retrieved from http://icirr.org/sites/default/files/fact%20sheet-demography%202011.pdf

Jagers, R. J., & Mock, L. O. (1993). Culture and social outcomes among inner-city African American children: An Afrographic exploration. *Journal of Black Psychology*, *19*(4), 391-405. doi: 10.1177/00957984930194002.

Jones, C. J., & Trickett, E. J. (2005). Immigrant adolescents behaving as culture brokers: A study of families from the former Soviet Union. *The Journal of Social Psychology*, *145*(4), 405-428.

Jose, P. E., & Ratcliffe, V. (2004). Stressor Frequency and Perceived Intensity as Predictors of Internalizing Symptoms: Gender. *New Zealand Journal of Psychology*, *33*(3), 145.

Kamya, H. A. (1997). African immigrants in the United States: The challenge for research and practice. *Social Work*, *42*(2), 154-165.

Kim, J., Suh, M., Kim, S., & Gopala, H. (2012). Coping strategies to manage acculturative stress: meaningful activity, participation, social support, and positive emotion among Korean immigrant adolescents in the USA. *International Journal of Qualitative Studies on Health and Well-being, (7)*. doi: 10.3402/qhw.v7i0.18870.

Kwak, K. (2003). Adolescents and their parents: a review of intergenerational family relations for immigrant and non-immigrant families. *Human Development, 46,* 115-136. doi: 10.1159/000068581.

Landis, D., Gaylord-Harden, N. K., Malinowski, S. L., Grant, K. E., Carleton, R. A., & Ford, R. E. (2007). Urban adolescent stress and hopelessness. *Journal of Adolescence*, *30*(6), 1051-1070.

Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological inquiry*, *1*(1), 3-13.

Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer Publishing Company.

Lewis-Coles, M. A. E. L., & Constantine, M. G. (2006). Racism-related stress, Africultural coping, and religious problem-solving among African Americans. *Cultural Diversity and Ethnic Minority Psychology*, *12*(3), 433. doi: 10.1037/1099-9809.12.3.433.

Liu, F. F., Gonzales, N. A., Fernandez, A. C., Millsap, R. E., & Dumka, L. E. (2011). Family stress and coping for Mexican origin adolescents. *Journal of Clinical*

Child & Adolescent Psychology, *40*(3), 385-397. doi: 10.1080/15374416.2011.563463.

Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., ... & Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child & Adolescent Psychiatry*, *43*(1), 24-36.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, *71*(3), 543-562.

McKenney, K. S., Pepler, D., Craig, W., & Connolly, J. (2006). Peer victimization and psychosocial adjustment: The experiences of Canadian immigrant youth. *Electronic Journal of Research in Educational Psychology*, *9*(4), 239-264.

Mejía, O. L., & McCarthy, C. J. (2010). Acculturative stress, depression, and anxiety in migrant farmwork college students of Mexican heritage. *International Journal of stress management*, *17*(1), 1-20. doi: 10.1037/a0018119.

Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences*, *9*(2), 207-225. doi: 10.1177/07399863870092006.

Mohamed, A., & Yusuf, A. M. (2012). Somali parent-child conflict in the western world: Some brief reflections. *Bildhaan: An International Journal of Somali Studies*, *11*(1), 164-173.

Molock, S. D., Puri, R., Matlin, S., & Barksdale, C. (2006). Relationship between religious coping and suicidal behaviors among African American adolescents. *Journal of Black Psychology*, *32*(3), 366-389. doi: 10.1177/0095798406290466.

Morrison Gutman, L., McLoyd, V. C., & Tokoyawa, T. (2005). Financial strain, neighborhood stress, parenting behaviors, and adolescent adjustment in urban African American families. *Journal of Research on Adolescence*, *15*(4), 425-449.

Mutume, G. (2003). Reversing Africa's brain drain. *Africa Recovery*, *17*(2), 1-9.

Noh, S. and Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. American Journal of Public Health, 93(2).

Nwadiora, C. (2007). African women immigrants in the U.S.: An Afrocentric analysis. African Americans, Women studies, 21, 324-450.

Ogbonnaya, A. O. (1994). Person as community: An African understanding of the person as an intrapsychic community. *Journal of Black Psychology*. doi: 10.1177/00957984940201007.

Olivo, A. (2013). African immigrants hope for a Chicago community of their own. *Chicago Tribune*. Retrieved from http://articles.chicagotribune.com/2013-01-14/news/ct-met-african-immigration-20130114_1_african-immigrants-immigrant-groups-alie-kabba.

Oppedal, B., Røysamb, E., & Heyerdahl, S. (2005). Ethnic group, acculturation, and psychiatric problems in young immigrants. *Journal of Child Psychology and Psychiatry*, *46*(6), 646-660.

Pierre, C. (2013). The Interactive Effects of Coping Strategies, Gender, and Stress in the Prediction of Internalizing Symptoms in African American Youth: An Application of the Specificity Model. (Unpublished masters thesis). Loyola University Chicago, Chicago, Illinois.

Polanco-Roman, L. and Miranda, R. (2013). Culturally related stress, hopelessness, and vulnerability to depressive symptoms and suicidal ideation in emerging adulthood. Behavior Therapy, 44: 75-87.

Program for Prevention Research. (1999). Manual for the children's coping strategies checklist and the how i coped under pressure scale. (Available from Arizona State University, P. O. Box 876005, Tempe, AZ 85287–6005).

Pumariega, A. J., Rothe, E., & Pumariega, J. B. (2005). Mental health of immigrants and refugees. *Community Mental Health Journal*, *41*(5), 581-597. doi: 10.1007/s10597-005-6363-1.

Romero, A. J., & Roberts, R. E. (2003). The Impact of Multiple Dimensions of Ethnic Identity on Discrimination and Adolescents' Self□Estees. *Journal of Applied Social Psychology*, *33*(11), 2288-2305.

Romero, A. J., Carvajal, S. C., Valle, F., & Orduña, M. (2007). Adolescent bicultural stress and its impact on mental well□being among Latinos, Asian Americans, and European Americans. *Journal of Community Psychology*, *35*(4), 519-534. doi: 10.1002/jcop.20162.

Sam, D. L., & Berry, J. W. (2006). *Introduction*. Cambridge University Press.

Schilling, E. A., Aseltine, R. H., & Gore, S. (2007). Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC Public Health*, *7*(1), 30.

Smokowski, P. R., Bacallao, M., & Buchanan, R. L. (2009). Interpersonal mediators linking acculturation stressors to subsequent internalizing symptoms and self esteem in latino adolescents. *Journal of Community Psychology*, *37*(8), 1024-1045. doi: 10.1002/jcop.20346.

Takyi, B. K. (2002). The Making of the Second Diaspora: On the Recent African Immigrant Community in the United States of America. *Western Journal of Black Studies*, *26*(1), 32-43.

Tolan, P. H., Gorman–Smith, D., Henry, D., Chung, K. S., & Hunt, M. (2002). The relation of patterns of coping of inner–city youth to psychopathology symptoms. *Journal of Research on Adolescence*, *12*(4), 423-449. doi: 10.1111/1532-7795.00040.

Trickett, E. J., & Birman, D. (2005). Acculturation, school context, and school outcomes: Adaptation of refugee adolescents from the former Soviet Union. *Psychology in the Schools*, *42*(1), 27-38. doi: 10.1002/pits.20024.

Trickett, E. J., & Jones, C. J. (2007). Adolescent culture brokering and family functioning: A study of families from Vietnam. *Cultural Diversity and Ethnic Minority Psychology*, *13*(2), 143. doi: 10.1037/1099-9809.13.2.143.

U.S. Department of Homeland Security (2013). *2013 Yearbook of Immigration Statistics*. Retrieved http://www.dhs.gov/yearbook-immigration-statistics.

U.S. Department of Homeland Security (2012). *2012 Yearbook of Immigration Statistics*. Retrieved from https://www.dhs.gov/sites/default/files/publications/ois_yb_2012.pdf.

Utsey, S. O., Bolden, M. A., Lanier, Y., & Williams, O. (2007). Examining the role of culture-specific coping as a predictor of resilient outcomes in African Americans from high-risk urban communities. *Journal of Black Psychology*,*33*(1), 75-93. doi: 10.1177/0095798406295094.

Utsey, S. O., Brown, C., & Bolden, M. A. (2004). Testing the structural invariance of the Africultural Coping Systems Inventory across three samples of African descent populations. *Educational and psychological measurement*,*64*(1), 185-195. doi: 10.1177/0013164403258461.

Wen, M., Hawkley, L. C., & Cacioppo, J. T. (2006). Objective and perceived neighborhood environment, individual SES and psychosocial factors, and self-rated health: An analysis of older adults in Cook County, Illinois. *Social science & medicine*, *63*(10), 2575-2590.

Vinokurov, A., Trickett, E. J., & Birman, D. (2002). Acculturative hassles and immigrant adolescents: A life-domain assessment for Soviet Jewish refugees. *The Journal of social psychology*, *142*(4), 425-445.

Yakushko, O. (2010). Stress and coping strategies in the lives of recent immigrants: A grounded theory model. *International Journal for the Advancement of Counselling*, *32*(4), 256-273. doi; 10.1007/s10447-010-9105-1.

Yeh, C. J. (2003). Age, acculturation, cultural adjustment, and mental health symptoms of Chinese, Korean, and Japanese immigrant youths. *Cultural Diversity and Ethnic Minority Psychology*, *9*(1), 34. doi: 10.1037/1099-9809.9.1.34.

Zakaryan, A. (2013). The Relation of Executive Functions to Active Coping Strategies and Internalizing Symptoms in a Community Sample of African-American Youth. (Unpublished masters thesis). Loyola University Chicago, Chicago, Illinois.

Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). Review: The development of coping across childhood and adolescence: An integrative review and critique of research. *International Journal of Behavioral Development*, *35*(1), 1-17. doi: 10.1177/0165025410384923.

VITA

Emma-Lorraine Bart-Plange was born in London, England and reared in Kansas City, Missouri. Prior to attending Loyola University Chicago, she received an honors Bachelor of Arts degree in Psychology, summa cum laude, in 2012 from Saint Louis University. Continuing in the tradition of Jesuit education, Ms. Bart-Plange is currently pursuing her doctoral degree in clinical psychology at Loyola University Chicago. During her time at Loyola, Ms. Bart-Plange has worked as a volunteer at the Pan African Association and has been dedicated to serving refugees and immigrants in the Chicago area.